

Appendix A

Public Notification That a Potential Event Was Occurring (40 CFR §50.14(c)(1))

FIGURE A-1
NATIONAL WEATHER SERVICE PUBLIC ZONES

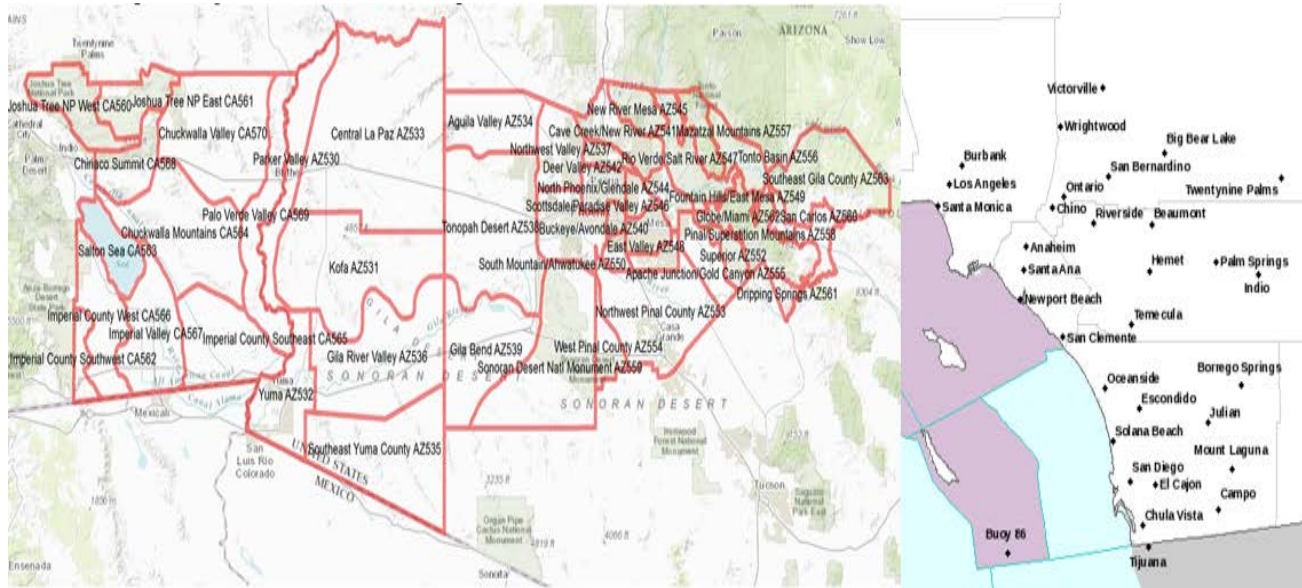


Fig A-1: Illustrates the public zones serviced by the National Weather Service Office in Phoenix and San Diego. Imperial County, including southeast sections of Riverside County are part of the reporting public zone areas from the Phoenix office

FIGURE A-2

AREA FORECAST DISCUSSION JUNE 28, 2015 – PAGE 1

10/10/2018

IEM :: AFD from NWS SGX

r
 960
 FXUS66 KSGX 290427
 AFDSGX

AREA FORECAST DISCUSSION
 NATIONAL WEATHER SERVICE SAN DIEGO CA
 930 PM PDT SUN JUN 28 2015

.SYNOPSIS... MONSOONAL FLOW THIS WEEK WILL BRING HIGH CLOUDS AND A CHANCE FOR SHOWERS AND ISOLATED THUNDERSTORMS...MAINLY OVER THE MOUNTAINS AND HIGH DESERTS. IT WILL CONTINUE TO BE VERY WARM AND SOMEWHAT HUMID THIS WEEK. AFTERNOON SEA BREEZES AND A SHALLOW MARINE LAYER WILL MODERATE THE WEATHER NEAR THE COAST.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

MIDDAY SHOWERS AND THUNDERSTORMS FORMED OVER THE SAN JACINTO MOUNTAINS...THE SAN BERNARDINO MOUNTAINS AND THE HIGH DESERTS TODAY. THE AREAL COVERAGE WAS SMALL AND RAIN AMOUNTS WERE LIGHT. GREEN VALLEY LAKE WAS THE BREADWINNER TODAY WITH 0.30". A RAINFALL SUMMARY IS HEADLINED ON OUR WEBSITE.

THE STRONGEST T-STORMS ERUPTED OVER SOUTHWEST AZ LATE THIS AFTERNOON AND SENT AN OUTFLOW BOUNDARY WITH 30-50 MPH WINDS TOWARD THE LOWER COLORADO RIVER VALLEY. BLOWING DUST REDUCED VISIBILITIES TO LESS THAN A MILE IN SW AZ. THE STORMS WILL WEAKEN OVERNIGHT AS THEY MOVE INTO IMPERIAL AND EASTERN RIVERSIDE COUNTIES.

MONSOONAL MOISTURE CONTINUED SURGING INTO SOUTHERN CALIFORNIA TODAY. THE PRECIPITABLE WATER ON THE 00Z NKX SOUNDING WAS 1.48"...WHICH RANKS AS THE 8TH HIGHEST JUNE PWAT AT KNKX. THE HIGHEST WAS 1.57" ON JUNE 10TH, 1990.

THE IR SATELLITE LOOP THIS EVENING SHOWS A SWATH OF MID AND HIGH CLOUDS EXTENDING FROM CENTRAL CALIFORNIA DOWN TO CENTRAL BAJA. THE CLOUDS WERE MOVING NORTHWEST AND ARE ASSOCIATED WITH A WEAK UPPER LEVEL SHORTWAVE THAT IS BARELY DISCERNIBLE ON THE WATER VAPOR LOOP. THIS WEAK WAVE WILL DRIFT NORTHWEST TONIGHT AND MAY BRING A FEW LIGHT SHOWERS TO SO-CAL TONIGHT INTO MONDAY MORNING. BUT DESPITE THE HIGH MOISTURE CONTENT OF THE ATMOSPHERE THE CHANCES ARE LOW. QPF OUTPUT FROM THE HIGH REZ MODELS TONIGHT IS VERY SPARSE. THE CANSAC WRF SHOWS ONLY LIGHT QPF OVER THE COASTAL WATERS...AND EVEN THE NORMALLY BULLISH NAM12 SHOWS VERY LITTLE PRECIP TONIGHT.

ON MONDAY THE SKIES WILL CLEAR FROM SOUTH TO NORTH WITH LARGE SYNOPTIC SCALE SUBSIDENCE BEHIND THE SHORTWAVE TROUGH AS IT LIFTS NORTH. PWATS REMAIN VERY HIGH FOR JUNE...NEARLY 1.5"...AND AFTERNOON HEATING COULD TRIGGER SCATTERED CONVECTION OVER THE MOUNTAINS. VERY WARM AGAIN MONDAY WHERE THE SUN BREAKS THROUGH THE CLOUDS WITH HIGHS

<http://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506290430>

2/4

FIGURE A-2 AREA FORECAST DISCUSSION JUNE 28, 2015 – PAGE 2

10/10/2018

IEM :: AFD from NWS SGX

ONCE AGAIN IN THE 90S TO AROUND 100 IN THE INLAND AREAS.

THE LARGE 595 DM HIGH OVER THE GREAT BASIN TONIGHT WILL REMAIN NEARLY STATIONARY THROUGH WEDNESDAY. MIDDLE LEVEL MOISTURE IN THE PREVAILING SOUTHEAST FLOW AROUND THE HIGH WILL CONTINUE TO STREAM INTO SO-CAL AND BRING THUNDERSTORM CHANCES TO THE MOUNTAINS EACH AFTERNOON AND EVENING. THE FLASH FLOOD POTENTIAL WILL BE MITIGATED BY THE 20-25KT MIDDLE LEVEL SE WINDS THAT KEEP THE STORMS MOVING ALONG AT A BRISK PACE. ALSO...MOST OF THE MOISTURE WILL BE ABOVE 700 MB WITH A DRY SUBCLOUD LAYER BELOW. SO THE BIGGEST THREAT MAY NOT BE FLASH FLOODING...BUT FROM GUSTY DOWNDRAFT WINDS AND LIGHTNING STRIKES.

ON THURSDAY THE CENTER OF THE UPPER RIDGE DRIFTS OVER NORTHERN NEVADA. THIS SLIGHT SHIFT TO THE NORTH WILL SET UP THE POTENTIAL FOR AN EASTERLY WAVE TO UNDERCUT THE RIDGE AND MOVE FROM SONORA MEXICO INTO SOUTHERN CALIFORNIA. IF THIS SCENARIO UNFOLDS...IT WOULD HAVE THE POTENTIAL TO BRING MORE WIDESPREAD SHOWER AND THUNDERSTORM COVERAGE TO THE REGION LATER THIS WEEK.

&&

.AVIATION... 290430Z...COAST/VALLEYS...MOSTLY BKN CLOUDS AT/ABOVE 10000 FT MSL WILL CONTINUE THROUGH MONDAY EVENING. THERE IS A SLIGHT CHANCE OF A LIGHT SHOWER OR THUNDERSTORM THROUGH MONDAY MORNING WITH CLOUD TOPS TO 30000 FT MSL POSSIBLE. STRATUS WILL BE MINIMAL...WITH ONLY PATCHY STRATUS WITHIN 10 MILES OF THE COAST MAINLY 10Z-16Z MONDAY...WITH BASES 800-1100 FT MSL AND TOPS TO 1300 FT MSL. TIMING/OCCURRENCE OF BKN CIGS FROM LOW STRATUS AT KSN/KCRQ IS LOW CONFIDENCE.

MTNS/DESERTS...MOSTLY BKN CLOUDS AT/ABOVE 10000 FT MSL WILL CONTINUE THROUGH MONDAY EVENING. THIS IS A CHANCE OF SHOWERS OR THUNDERSTORMS THROUGH MONDAY EVENING WITH CLOUDS TOPS TO 30000 FT MSL POSSIBLE...AND LOCAL GUSTY SURFACE WINDS.

&&

.MARINE... 930 PM...THERE IS A SLIGHT CHANCE OF A THUNDERSTORM IN THE COASTAL WATERS THROUGH MONDAY MORNING...WITH CLOUD TO WATER STRIKES BEING THE PRIMARY THREAT. OTHERWISE...NO OTHER HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH FRIDAY.

&&

.SKYWARN...
SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.

<http://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506290430>

3/4

Fig A-2: An Area Forecast Discussion issued by the Phoenix NWS office at 0830 pm PST (0930 pm PDT) on Sunday, June 28, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506290430>

FIGURE A-3 AREA FORECAST DISCUSSION JUNE 29, 2015

10/10/2018

IEM :: AFD from NWS SGX

1
076
FXUS66 KSGX 291052
AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
352 AM PDT MON JUN 29 2015

.SYNOPSIS...

HIGH PRESSURE OVER THE GREAT BASIN AND LOW PRESSURE OFF THE CALIFORNIA AND BAJA COASTS WILL DIRECT A FLOW OF MID AND HIGH LEVEL MONSOONAL MOISTURE ACROSS SOUTHERN CALIFORNIA FOR MUCH OF THE WEEK. THIS WILL SUPPORT A CHANCE OF THUNDERSTORMS...MAINLY NEAR THE MOUNTAINS IN THE AFTERNOON...THROUGH THURSDAY OR FRIDAY FOLLOWED BY SLOW DRYING FOR NEXT WEEKEND. TEMPERATURES WILL BE ABOVE AVERAGE THROUGH WEDNESDAY...THEN COOL TO NEAR AVERAGE FOR THURSDAY THROUGH NEXT WEEKEND. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL BRING PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

.SHORT TERM (TODAY THROUGH WEDNESDAY)...

A FEW SHOWERS ARE POSSIBLE THIS MORNING...MAINLY OVER THE MOUNTAINS AND DESERTS OF SAN DIEGO AND RIVERSIDE COUNTIES. OTHERWISE...HIGHER LEVEL MONSOONAL MOISTURE WILL BEGIN TO DECREASE TODAY WITH MID LEVEL MONSOONAL MOISTURE REMAINING THROUGH WEDNESDAY. THIS WILL BRING A CHANCE OF MAINLY AFTERNOON THUNDERSTORMS...MAINLY NEAR THE MOUNTAINS. TEMPERATURES WILL REMAIN ABOVE AVERAGE. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL BRING PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST.

&&

.LONG TERM (WEDNESDAY NIGHT THROUGH SUNDAY)...

RESIDUAL MID LEVEL MONSOONAL MOISTURE WILL MAINTAIN A SLIGHT CHANCE OF THUNDERSTORMS...MAINLY NEAR THE MOUNTAINS IN THE AFTERNOON... THROUGH THURSDAY OR FRIDAY. THE ECMWF CONTINUES TO ADVERTISE THE POTENTIAL FOR A WEAK EASTERLY WAVE TO MOVE THROUGH SOUTHERN CALIFORNIA ON WEDNESDAY NIGHT AND THURSDAY. THIS WOULD INCREASE CLOUD COVERAGE AND COULD INCREASE PRECIPITATION CHANCES SOMEWHAT. FOR FRIDAY THROUGH NEXT WEEKEND...THE ECMWF CONTINUES TO SHOW A LITTLE GREATER AND FASTER DRYING OF THE MONSOONAL MOISTURE. TEMPERATURES WILL RETURN TO NEAR SEASONAL LEVELS.

&&

.AVIATION...

<http://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506291052>

2/4

Fig A-3: An Area Forecast Discussion issued by the Phoenix NWS office at 0252 am PST (0352 am PDT) on Monday, June 29, 2015. Source: Iowa State University; Iowa Environmental Mesonet at <https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506291052>

FIGURE A-4 AREA FORECAST DISCUSSION JUNE 29, 2015

10/10/2018

IEM :: AFD from NWS SGX

435
FXUS66 KSGX 291622
AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
922 AM PDT MON JUN 29 2015

.SYNOPSIS...

AN UPPER LEVEL DISTURBANCE MOVING THROUGH THE REGION FROM THE EAST WILL PRODUCE CLOUDS WITH SOME SPRINKLES TO THE FORECAST AREA THROUGH THIS AFTERNOON. HIGH PRESSURE OVER THE GREAT BASIN AND LOW PRESSURE OFF THE CALIFORNIA AND BAJA COASTS WILL CONTINUE TO DIRECT A FLOW OF MID AND HIGH LEVEL MONSOONAL MOISTURE ACROSS SOUTHERN CALIFORNIA FOR MUCH OF THE WEEK. THIS WILL SUPPORT A CHANCE OF THUNDERSTORMS THROUGH FRIDAY MAINLY NEAR THE MOUNTAINS AND PORTIONS OF THE DESERTS DURING THE AFTERNOON AND EARLY EVENING HOURS. SLOW DRYING IS POSSIBLE THIS WEEKEND. TEMPERATURES WILL BE ABOVE AVERAGE THROUGH WEDNESDAY...THEN COOL TO NEAR TO SLIGHTLY BELOW AVERAGE FOR THURSDAY THROUGH THE WEEKEND AS HIGH PRESSURE ALOFT WEAKENS. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL BRING PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST AND WESTERN VALLEYS AT TIMES.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

MORNING VISIBLE SATELLITE SHOWS AREAS OF MID AND HIGH LEVEL CLOUDS MOVING OVER THE REGION FROM THE EAST-SOUTHEAST...WITH RADAR INDICATING SOME EMBEDDED LIGHT SHOWERS/SPRINKLES. HAVE NOT RECEIVED ANY REPORTS OF MEASURABLE RAINFALL OVER THE PAST 12 HOURS FROM THESE

ECHOES...SO MOST OF THEM ARE LIKELY JUST SPRINKLES/VIRGA DUE TO THE CONTINUED DRY LOWER LAYER OF THE ATMOSPHERE. THIS DRY LAYER IS INDICATED WELL ON THE 12Z MIRAMAR SOUNDING...WITH MOST OF THE MOISTURE LOCATED ABOVE 600 MB ALL THE WAY TO THE TROPOPAUSE. MEANWHILE...A NEAR SURFACE MARINE LAYER INVERSION IS ALSO SHOWN...BUT ONLY A FEW PATCHES OF STRATUS WERE ABLE TO FORM ALONG THE COAST THIS MORNING DUE TO INTERFERENCE FROM ALL THE MID AND UPPER LEVEL MOISTURE. THIS LOW STRATUS SHOULD CLEAR OUT BY LATE MORNING.

ON WATER VAPOR SATELLITE...A RIDGE CAN BE SEEN OVER THE GREAT BASIN...WITH A LOW FAR SOUTHWEST OF LOS ANGELES. THIS POSITIONING OF THE RIDGE AND TROUGH IS RESULTING IN THE MOIST SOUTHEAST FLOW OVER THE REGION TODAY. THE AREAS OF MID AND UPPER LEVEL CLOUDS...SHOWERS AND SPRINKLES MOVING THROUGH THIS MORNING ARE ASSOCIATED WITH AN UPPER LEVEL WAVE ROTATING AROUND THE RIDGE. 14Z HRRR INDICATES THAT ISOLATED-TO-SCATTERED SPRINKLES WILL CONTINUE THROUGH THE MORNING...WITH LARGER AREAS OF SPRINKLES/LIGHT SHOWERS MOVING THROUGH THE AREA THIS AFTERNOON. AFTERNOON/EARLY EVENING THUNDERSTORM CHANCES FOR THE MOUNTAINS AND PORTIONS OF THE DESERTS

<http://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506291622>

2/5

Fig A-4: An Area Forecast Discussion issued by the Phoenix NWS office at 0822 am PST (0922 am PDT) on Monday, June 29, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506291622>

FIGURE A-5 AREA FORECAST DISCUSSION JUNE 29, 2015 – PAGE 1

10/25/2017

IEM :: AFD from NWS PSR

583
FXUS65 KPSR 300420
AFDPSR

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
920 PM MST MON JUN 29 2015

.SYNOPSIS...
OCCASIONAL SHOWERS AND THUNDERSTORMS WILL BE COMMON ACROSS THE MOUNTAINS OF SOUTHERN AND EASTERN ARIZONA THROUGH MUCH OF THE WEEK. THERE WILL BE SOME OPPORTUNITY FOR SHOWERS TO AFFECT LOWER ELEVATION DESERT COMMUNITIES DURING THE MIDDLE OF THE WEEK...HOWEVER THE MOST LIKELY OUTCOME IN THESE AREAS WILL ONLY BE GUSTY WINDS AND SOME BLOWING DUST. AFTERNOON TEMPERATURES WILL REMAIN SLIGHTLY ABOVE NORMAL THIS WEEK BEFORE MODERATING BACK DOWN TOWARDS NORMAL BY THE WEEKEND.

&&

.DISCUSSION...
ACTIVITY THIS EVENING WAS HIGHLIGHTED BY BLOWING DUST ACROSS PINAL COUNTY AND A SEVERE THUNDERSTORM NEAR WICKENBURG. THE STORM NEAR WICKENBURG PRODUCED WINDS ABOVE 65 MPH ALONG WITH RADAR ESTIMATES OF AS MUCH AS 1 TO 3 INCHES OF RAIN. FLOW HAS INCREASED IN AREA WASHES AND A FLASH FLOOD WARNING REMAINS IN EFFECT FOR EXTREME NORTHERN MARICOPA COUNTY.

MUCH OF THE CONVECTIVE ALLOWING GUIDANCE DID NOT CAPTURE THE ACTIVITY ACROSS NORTHWESTERN MARICOPA COUNTY THIS EVENING. LATEST RUNS OF THE HRRR SUGGEST THE SHOWERS AND ISOLATED THUNDERSTORMS WILL CONTINUE TO DEVELOP ACROSS WESTERN MARICOPA AND LA PAZ COUNTIES TONIGHT. LATEST MESOANALYSIS SHOWS WIDESPREAD MLCAPE ABOVE 1000 J/KG WITH ONLY WEAK INHIBITION AND POPS WILL BE INCREASED IN THESE AREAS.

&&

.PREVIOUS DISCUSSION...
THE OPERATIONAL GFS AND ECMWF HINT AT SOME MEASURE OF AN EASTERLY WAVE ROTATING ABOUT THE SRN PERIPHERY OF THE ANTI-CYCLONE EITHER TUESDAY OR WEDNESDAY (AS EVIDENCED IN FORECAST Q-VECTOR FIELDS). CURRENT FORECASTS HAVE POPS GRADUALLY RAMPING UP THROUGH MIDWEEK...WITH WEDNESDAY THE PEAK CHANCES...30 PERCENT OR LESS...AS A WEAK SHORTWAVE WORKS INTO THE REGION WHILE THE UPPER RIDGE BEGINS TO TILT BACK TOWARDS THE PAC NW. MODEL LL/ML CAPES OF 700-1100 J/KG ARE POSSIBLE ACROSS THE AREA BY THE AFTERNOON AS THE 200/300MB RIDGE CENTERS BEGIN TO CO-LOCATE OVER THE FOUR CORNERS. DAYTIME TEMPERATURES THROUGH THE MAJORITY OF THE WORK WEEK WILL REMAIN ON THE ABOVE-NORMAL SIDE...RANGING 105-110F OR SO WITH FAIRLY MILD OVERNIGHTS.

THE WRN CONUS PATTERN WILL MODIFY VERY SLIGHTLY DURING THE LATTER HALF OF THE WEEK...WITH THE HIGH PRESSURE RIDGE CURRENTLY OVER UTAH BECOME STRETCHED AND ELONGATED IN A NW-SE ORIENTED FASHION. THIS CONFIGURATION MAY NOT BE AS CONDUCTIVE FOR ENHANCED MONSOON CONVECTION...HOWEVER CERTAINLY WILL NOT PRECLUDE REGIONAL THUNDERSTORM ACTIVITY. HAVE KEPT POPS ALMOST EXCLUSIVELY LIMITED TO HIGHER TERRAIN LOCATIONS DURING THIS TIME FRAME AS MOISTURE MAY BEGIN TO MIX OUT AT LOWER ELEVATIONS. HOWEVER TOWARDS THE END OF THIS FORECAST PERIOD EARLY NEXT WEEK...THE AFOREMENTIONED HIGH PRESSURE CORE WILL LIKELY SHIFT WELL BACK TO THE EAST NEAR THE FOUR CORNERS AND COLORADO...WHICH IS TRADITIONALLY A VERY FAVORABLE LOCATION WITH ENHANCED DEEP SOUTHEAST FLOW AND GOOD MOISTURE ADVECTION.

&&

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIMA...KSDL...
TYPICAL MONSOONAL PATTERN EXPECTED TONIGHT WITH STORMS FIRING OVER THE EASTERN MOUNTAINS...AND AN EASTERLY STEERING FLOW WITH THE POTENTIAL TO BRING THOSE STORMS INTO THE WRN/ERN FRINGES OF THE GREATER PHOENIX AREA DURING THE EVENING HOURS. A MITIGATING FACTOR IS SOMEWHAT DRIER AIR LOCATED OVER SERN/ECNTR AZ WHICH MAY LIMIT THE COVERAGE OF STORMS TO OUR EAST TONIGHT. AT THIS TIME CONFIDENCE IS SOMEWHAT LOW THAT THE STORMS WILL SURVIVE INTO THE LOWER DESERTS AND AS SUCH WE WILL NOT MENTION THUNDER IN THE AREA TAFs. BLOWING DUST FROM THE SOUTH/SOUTHEAST IS ALSO A THREAT BUT THIS WILL BE ADDRESSED IN SHORT TERM TAF UPDATES SHOULD THE DUST MATERIALIZE AND THREATEN TO MOVE INTO THE PHOENIX AREA. FOR THE NEXT 24 HOURS WILL

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pi=AFDPSR&e=201506300420>

2/3

FIGURE A-5 AREA FORECAST DISCUSSION JUNE 29, 2015 – PAGE 2

10/25/2017

IEM :: AFD from NWS PSR

LIMIT ANY CIGS TO MID LEVEL CLOUD DECKS...120K FEET AND UP.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...
EXPECT MOSTLY CLEAR SKIES REST OF THE AFTERNOON AND THROUGH THE
EVENING...WITH THE POTENTIAL FOR MID/HI LEVEL DEBRIS DECKS TO MOVE
INTO THE AREA AFTER 09Z OR SO. OF COURSE THIS DEPENDS ON THE
EXPECTED ROUND OF CONVECTION DEVELOPING OVER THE EASTERN MOUNTAINS
AND THEN MOVING WITH THE ELY STEERING FLOW AND INTO THE WESTERN
DESERTS LATER TONIGHT AND INTO THE MORNING ON TUESDAY. CHANCES FOR
STORMS AFFECTING THE TAF SITES TONIGHT IS NOT ZERO...BUT MAY TOO LOW
TO MAKE ANY MENTION IN THE TAFS AT THIS TIME.

WINDS TO FAVOR THE SOUTH MOST OF THE NEXT 24 HOURS AT KBLH...AND
FAVOR THE SOUTHEAST AT KIPL WITH SPEEDS MOSTLY AOB 12KT.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

##

.FIRE WEATHER...

THURSDAY THROUGH MONDAY...

A LOW GRADE MONSOON PATTERN WILL BE IN PLACE THROUGH THE WEEK...
CHARACTERIZED BY NEAR OR SLIGHTLY ABOVE NORMAL TEMPERATURES...AND
WIDELY SCATTERED AFTERNOON AND EVENING SHOWERS/THUNDERSTORMS THAT
MOVE FROM EAST TO WEST OFF THE MOUNTAINS AND INTO THE LOWER DESERTS
EACH DAY. FOR THURSDAY INTO SATURDAY THE STORMS WILL PRIMARILY FOCUS
OVER THE HIGHER TERRAIN WITH RATHER LOW CHANCES OF SURVIVING INTO
THE LOWER DESERTS. SUNDAY INTO EARLY NEXT WEEK...AS HUMIDITIES RISE
THERE WILL BE A BETTER CHANCE OF THUNDERSTORMS AND SHOWERS MOVING
INTO THE CENTRAL DESERTS DURING THE OVERNIGHT HOURS. DAYTIME
HUMIDITY VALUES GENERALLY WILL BE IN THE UPPER TEENS TO MID 20
PERCENT RANGE THROUGH SATURDAY WITH HUMIDITIES RISING SEVERAL
PERCENT BY MONDAY. VERY GOOD OVERNIGHT RECOVERY IS EXPECTED EACH
NIGHT. WINDS EACH DAY WILL BE LIGHT AND FAVOR SOUTHWESTERLY
DIRECTIONS THROUGH FRIDAY...BECOMING SOUTHERLY BY THE WEEKEND.

##

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT ANY SIGNIFICANT WEATHER CONDITIONS
ACCORDING TO STANDARD OPERATING PROCEDURES.

##

.PSR MATCHES/WARNINGS/ADVISORIES...

AZ...NONE.

CA...NONE.

##

\$\$

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...HIRSCH

PREVIOUS DISCUSSION...NOLTE/MO

AVIATION...CB

FIRE WEATHER...CB

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

Department of Agronomy
716 Farm House Ln
Ames, IA 50011

akrherz@iastate.edu
515-294-5978 phone



<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201506300420>

3/3

Fig A-5: An Area Forecast Discussion issued by the Phoenix NWS office at 0820 pm PST (0920 pm PDT) on Monday, June 29, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-6 AREA FORECAST DISCUSSION FOR JUNE 29, 2015

10/25/2017

IEM :: AFD from NWS SGX

r
 145
 FXUS66 KSGX 300437
 AFDSGX

 AREA FORECAST DISCUSSION
 NATIONAL WEATHER SERVICE SAN DIEGO CA
 930 PM PDT MON JUN 29 2015

 .SYNOPSIS...
 SOUTHEAST FLOW ALOFT WILL CONTINUE TO BRING MOISTURE INTO SOUTHERN CALIFORNIA AND BRING SLIGHT CHANCES OF THUNDERSTORMS...MAINLY TO THE MOUNTAINS AND MAINLY DURING THE AFTERNOONS THROUGH THURSDAY. A HIGH PRESSURE RIDGE CENTERED OVER UTAH AND WEAK ONSHORE FLOW WILL KEEP TEMPERATURES ABOVE NORMAL THROUGH WEDNESDAY...THEN AS ONSHORE FLOW STRENGTHENS LATE IN THE WEEK...THERE WILL BE A COOLING TREND. DRY WEATHER WILL RETURN FRIDAY OR SATURDAY AND CONTINUE THROUGH THE WEEKEND AS THE MOISTURE ALOFT DECREASES. COASTAL LOW CLOUDS WILL GRADUALLY INCREASE THE REST OF THIS WEEK.

 @@

 .DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

 SKIES HAD MOSTLY CLEARED EARLY THIS EVENING AFTER ISOLATED SHOWERS AND THUNDERSTORMS OCCURRED THIS AFTERNOON. CLOUDS SHOULD INCREASE AGAIN OVERNIGHT AS DEBRIS CLOUDS MOVE WEST FROM THE THUNDERSTORMS THAT OCCURRED OVER ARIZONA TODAY/THIS EVENING. STRATUS SHOULD BE SOMEWHAT LIMITED AND DEVELOP LATE...BUT WITH FEWER CLOUDS ALOFT AND SOMEWHAT STRONGER ONSHORE FLOW...THERE SHOULD BE A LITTLE MORE THAN LAST NIGHT/THIS MORNING.

 SOUTHEAST FLOW WILL CONTINUE TO BRING MID AND HIGH LEVEL MOISTURE TO THE REGION IN THE 700-400 MB RANGE...SOMETIMES HIGHER. THERE WILL BE QUITE A LOT OF HIGH CLOUDINESS TO CUT DOWN ON INSTABILITY IN THE MOUNTAINS AND DESERTS...BUT THERE SHOULD BE ENOUGH FOR AT LEAST A FEW THUNDERSTORMS. HOWEVER...THE DRY LAYER BETWEEN 950 MB AND 700 MB WILL RESULT IN EVAPORATION OF A LOT OF THE PRECIP...AND WINDS OF 20-25 KNOTS...SOMETIMES HIGHER...WILL RESULT IN RAPID MOVEMENT OF THE CELLS. THUS...PRECIP AMOUNTS WILL GENERALLY BE LOW...WITH ONLY VERY ISOLATED LOCATIONS GETTING ONE-QUARTER INCH OR MORE. BEST CHANCES WILL BE IN THE AFTERNOON...THOUGH WITH SOME PERIODIC ELEVATED MUCAPE IN THE 700-500 MB LAYER...A NOCTURNAL STORM IS NOT OUT OF THE QUESTION...MAINLY TOWARDS MID-WEEK. FOR TUESDAY...BEST SURFACE CONVERGENCE OCCURS OVER THE MOUNTAINS...WHICH MEANS HIGHER MOUNTAIN TERRAIN WILL HAVE THE BEST CHANCE OF PRECIP. HOWEVER...THE TREND FOR WED AND ESPECIALLY THU WITH THE STRONGER ONSHORE FLOW WILL MEAN THAT SURFACE CONVERGENCE WILL BE STRONGEST IN THE DESERTS WHICH IS NOT AS FAVORABLE FOR MOUNTAIN STORMS. ALSO...IT WILL BECOME FAIRLY WINDY THROUGH SAN GORGONIO PASS AND ON THE DESERT MOUNTAIN SLOPES STARTING LATE WED DUE TO THE STRONGER ONSHORE FLOW.

 BY THE WEEKEND...WE SHOULD DRY OUT AS THE FLOW WILL BE MORE SOUTHERLY OR EVEN A BIT SOUTHWESTERLY INSTEAD OF EAST-SOUTHEASTERLY. ONSHORE FLOW SHOULD BE FAIRLY STRONG...THOUGH RIDGING WILL CONTINUE INLAND...SO TEMPS WILL BE NEAR NORMAL...EXCEPT A LITTLE BELOW NORMAL NEAR THE COAST WHERE THE MARINE LAYER WILL PREVAIL. ECMWF HAS MONSOONAL MOISTURE RETURNING EARLY NEXT WEEK...BUT GFS HAS THAT DELAYED UNTIL MID-WEEK. FOR NOW...I WILL KEEP EARLY NEXT WEEK DRY.

 @@

 .AVIATION...
 300315Z...COAST/VALLEYS...SCT-BKN CLOUDS AOA 10000 FT MSL THROUGH TUE. AREAS OF MARINE STRATUS REDEVELOPING LATE AFT 09Z THROUGH 14Z TUE EXTENDING LOCALLY INLAND 5-10 SM...MAINLY SAN DIEGO COUNTY COAST. BASES ARE EXPECTED TO BE 800 TO 1200 FT MSL WITH TOPS BLO 1500 FT MSL. THE STRATUS DECK WILL DISSIPATE BEFORE 18Z. CONFIDENCE IN TIMING/OCCURRENCE IS LOW AND LOWER CLOUDS ARE NOT EXPECTED TO REACH KSNA.

 MTNS/DESERTS...SCT-BKN CLOUDS AOA 10000 FT MSL THROUGH TUE. CU/TCU DEVELOPING AFT 18Z THROUGH 22Z WITH ISOLATED -SHRA/TSRA AND TOPS TO NEAR FL300. LOCAL GUSTY DOWNDRAFT WINDS MAY RESULT IN STRONG SFC WIND GUSTS AND LLWS WITH LOCAL VIS RESTRICTIONS IN BLOWING DUST.

 @@

 .MARINE...

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506300430>

2/3

Fig A-6: An Area Forecast Discussion issued by the San Diego NWS office at 0830 pm PST (0930 pm PDT) on Monday, June 29, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-7

AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 1

10/25/2017

IEM :: AFD from NWS PSR

7
945
FXUS65 KPSR 301031
AFDPSR

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
328 AM MST TUE JUN 30 2015

.SYNOPSIS...
OCCASIONAL SHOWERS AND THUNDERSTORMS WILL BE COMMON ACROSS THE MOUNTAINS OF SOUTHERN AND EASTERN ARIZONA THROUGH MUCH OF THE WEEK. THERE WILL BE SOME OPPORTUNITY FOR SHOWERS TO AFFECT LOWER ELEVATION DESERT COMMUNITIES DURING THE MIDDLE OF THE WEEK...HOWEVER THE MOST LIKELY OUTCOME IN THESE AREAS WILL ONLY BE GUSTY WINDS AND SOME BLOWING DUST. AFTERNOON TEMPERATURES WILL REMAIN SLIGHTLY ABOVE NORMAL THIS WEEK BEFORE MODERATING BACK DOWN TOWARDS NORMAL BY THE WEEKEND.

&&

.DISCUSSION...
SATELLITE IMAGERY THIS MORNING SHOWS CONSIDERABLE DEBRIS CLOUDS THAT REMAIN OVER WESTERN ARIZONA AND SOUTHERN CALIFORNIA AS A RESULT OF SEVERAL SMALLER THUNDERSTORM COMPLEXES THAT FORMED OVER ARIZONA YESTERDAY EVENING. ACROSS SOUTHEAST AZ AND SOUTHWEST NM...A WEAK UPPER LEVEL WAVE IS CONTINUING TO BREW THUNDERSTORM ACTIVITY THAT WILL GRADUALLY DIMINISH AND MOVE OVER SONORA MEXICO BY SUNRISE. SURFACE CONDITIONS IN MANY LOCATIONS OF THE LOWER DESERTS ARE RUNNING A FEW DEGREES COOLER THAN YESTERDAY MORNING...ALL DUE TO RAIN COOLED OUTFLOWS AND PRECIPITATION.

OPERATIONAL MODELS CONTINUE TO PLACE THE CENTER OF THE 594-596DM ANTICYCLONE OVER UTAH TODAY...THE CENTER ELONGATING AND THE AXIS TAKING ON A NW TO SE ORIENTATION OVER NEVADA AND INTO NEW MEXICO BY WEDNESDAY AFTERNOON. AS THE HIGH REPOSITIONS...A WAVE OR TWO ROTATES AROUND THE SOUTHERN PERIPHERY OF THE HIGH. THESE FEATURES WILL HELP TO ENHANCE PRECIPITATION CHANCES TODAY AND WEDNESDAY...ALBEIT STILL SLIGHT CHANCES FOR THE LOWER DESERTS...AND THE BEST CHANCES OVER THE HIGHER TERRAIN EAST OF PHOENIX. DAYTIME TEMPERATURES THROUGH THE MAJORITY OF THE WORK WEEK WILL REMAIN ON THE ABOVE-NORMAL SIDE...RANGING 105-110F OR SO WITH FAIRLY MILD OVERNIGHTS.

THE UPPER LEVEL HIGH REMAINS IN A NW-SE ORIENTED FASHION THROUGH FRIDAY. THIS CONFIGURATION WILL CONTINUE TO PROMOTE A LOW GRADE MONSOON PATTERN AND DAILY CONVECTION DEPENDENT ON HOW INSTABILITY MODIFIES OVER TIME. PRECIPITATION CHANCES DWINDLE A BIT THURSDAY AND FRIDAY AS THE LOW LEVEL FLOW IS REALLY NOT CONDUCTIVE TO IMPORTING RICHER MOISTURE INTO THE REGION. SO...THE BEST PRECIP CHANCES WILL BE LIMITED TO HIGHER TERRAIN LOCATIONS DURING THIS TIME FRAME AS MOISTURE MAY BEGIN TO MIX OUT AT LOWER ELEVATIONS.

HOWEVER...BY SATURDAY-SUNDAY...THE HIGH BEGINS TO SHIFT AND THE AXIS ONCE AGAIN ALIGNING NORTH TO SOUTH OVER THE INTERMOUNTAIN WEST...THE HIGH 500-300MB CENTERS STACKING/CO-LOCATING NEAR THE FOUR CORNERS AREA. THIS IS A VERY FAVORABLE POSITION OF THE HIGH FOR SOUTHEAST FLOW AND GOOD MOISTURE ADVECTION.

&&

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...KSDL...
TYPICAL MONSOONAL PATTERN EXPECTED TONIGHT WITH STORMS FIRING OVER THE EASTERN MOUNTAINS...AND AN EASTERLY STEERING FLOW WITH THE POTENTIAL TO BRING THOSE STORMS INTO THE NRN/ERN FRINGES OF THE GREATER PHOENIX AREA DURING THE EVENING HOURS. A MITIGATING FACTOR IS SOMEWHAT DRIER AIR LOCATED OVER SERN/ECNTRL AZ WHICH MAY LIMIT THE COVERAGE OF STORMS TO OUR EAST TONIGHT. AT THIS TIME CONFIDENCE IS SOMEWHAT LOW THAT THE STORMS WILL SURVIVE INTO THE LOWER DESERTS AND AS SUCH WE WILL NOT MENTION THUNDER IN THE AREA TAFs. BLOWING DUST FROM THE SOUTH/SOUTHEAST IS ALSO A THREAT BUT THIS WILL BE ADDRESSED IN SHORT TERM TAF UPDATES SHOULD THE DUST MATERIALIZE AND THREATEN TO MOVE INTO THE PHOENIX AREA. FOR THE NEXT 24 HOURS WILL LIMIT ANY CIGs TO MID LEVEL CLOUD DECKS...120K FEET AND UP.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...
EXPECT MOSTLY CLEAR SKIES REST OF THE AFTERNOON AND THROUGH THE EVENING...WITH THE POTENTIAL FOR MID/HI LEVEL DEBRIS DECKS TO MOVE INTO THE AREA AFTER 09Z OR SO. OF COURSE THIS DEPENDS ON THE EXPECTED ROUND OF CONVECTION DEVELOPING OVER THE EASTERN MOUNTAINS AND THEN MOVING WITH THE ELY STEERING FLOW AND INTO THE WESTERN

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pi=AFDPSR&e=201506301028>

2/3

FIGURE A-7 AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 2

10/25/2017

IEM :: AFD from NWS PSR

DESERTS LATER TONIGHT AND INTO THE MORNING ON TUESDAY. CHANCES FOR STORMS AFFECTING THE TAF SITES TONIGHT IS NOT ZERO...BUT MAY TOO LOW TO MAKE ANY MENTION IN THE TAFS AT THIS TIME.

WINDS TO FAVOR THE SOUTH MOST OF THE NEXT 24 HOURS AT KBLH...AND FAVOR THE SOUTHEAST AT KIPL WITH SPEEDS MOSTLY AOB 12KT.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

##

.FIRE WEATHER...

THURSDAY THROUGH MONDAY...

A LOW GRADE MONSOON PATTERN WILL BE IN PLACE THROUGH THE WEEK... CHARACTERIZED BY NEAR OR SLIGHTLY ABOVE NORMAL TEMPERATURES...AND WIDELY SCATTERED AFTERNOON AND EVENING SHOWERS/THUNDERSTORMS THAT MOVE FROM EAST TO WEST OFF THE MOUNTAINS AND INTO THE LOWER DESERTS EACH DAY. FOR THURSDAY INTO SATURDAY THE STORMS WILL PRIMARILY FOCUS OVER THE HIGHER TERRAIN WITH RATHER LOW CHANCES OF SURVIVING INTO THE LOWER DESERTS. SUNDAY INTO EARLY NEXT WEEK...AS HUMIDITIES RISE THERE WILL BE A BETTER CHANCE OF THUNDERSTORMS AND SHOWERS MOVING INTO THE CENTRAL DESERTS DURING THE OVERNIGHT HOURS. DAYTIME HUMIDITY VALUES GENERALLY WILL BE IN THE UPPER TEENS TO MID 20 PERCENT RANGE THROUGH SATURDAY WITH HUMIDITIES RISING SEVERAL PERCENT BY MONDAY. VERY GOOD OVERNIGHT RECOVERY IS EXPECTED EACH NIGHT. WINDS EACH DAY WILL BE LIGHT AND FAVOR SOUTHWESTERLY DIRECTIONS THROUGH FRIDAY...BECOMING SOUTHERLY BY THE WEEKEND.

##

.SPOTTER INFORMATION STATEMENT...

SPOTTERS ARE ENCOURAGED TO REPORT ANY SIGNIFICANT WEATHER CONDITIONS ACCORDING TO STANDARD OPERATING PROCEDURES.

##

.PSR MATCHES/WARNINGS/ADVISORIES...

AZ...NONE.

CA...NONE.

##

\$\$

VISIT US ON FACEBOOK...TWITTER...AND AT WEATHER.GOV/PHOENIX

DISCUSSION...MEYERS

AVIATION...CB

FIRE WEATHER...CB

**IOWA STATE
UNIVERSITY**

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



GitHub



YouTube

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201506301028>

3/3

Fig A-7: An Area Forecast Discussion issued by the Phoenix NWS office at 0253 am PST (0328 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-8 AREA FORECAST DISCUSSION FOR JUNE 30, 2015

10/25/2017

IEM :: AFD from NWS SGX

393
 FXUS66 KSGX 301032
 AFDGKX

 AREA FORECAST DISCUSSION
 NATIONAL WEATHER SERVICE SAN DIEGO CA
 332 AM PDT TUE JUN 30 2015

.SYNOPSIS...
 HIGH PRESSURE OVER THE GREAT BASIN AND LOW PRESSURE OFF THE CALIFORNIA AND BAJA COASTS WILL CONTINUE TO DIRECT A FLOW OF MID AND HIGH LEVEL MONSOONAL MOISTURE ACROSS SOUTHERN CALIFORNIA FOR MUCH OF THE WEEK INTO EARLY NEXT WEEK. THIS WILL SUPPORT A CHANCE OF THUNDERSTORMS THROUGH THURSDAY...MAINLY NEAR THE MOUNTAINS AND PORTIONS OF THE DESERTS DURING THE AFTERNOON HOURS. MINOR DRYING IS POSSIBLE FOR FRIDAY AND SATURDAY WITH ANOTHER CHANCE FOR AFTERNOON THUNDERSTORMS FOR THE MOUNTAINS AND DESERTS SUNDAY AND MONDAY. TEMPERATURES WILL PEAK TODAY...THEN COOL TO NEAR AVERAGE FOR FRIDAY THROUGH EARLY NEXT WEEK. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL BRING PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST AND WESTERN VALLEYS AT TIMES.

 HIGH PRESSURE OVER THE GREAT BASIN AND LOW PRESSURE OFF THE CALIFORNIA AND BAJA COASTS WILL CONTINUE TO DIRECT A FLOW OF MID AND HIGH LEVEL MONSOONAL MOISTURE ACROSS SOUTHERN CALIFORNIA FOR MUCH OF THE WEEK INTO EARLY NEXT WEEK.

MONDAY EVENING SOUNDINGS SHOWED MID LEVEL MOISTURE BETWEEN 500 AND 600 MB WITH DRYING ALOFT. THUNDERSTORMS DID OCCUR MONDAY DURING THE LATE MORNING AND EARLY MORNING OVER SOUTHERN PORTIONS OF THE SAN DIEGO COUNTY MOUNTAINS. BUT THE MOISTURE DISTRIBUTION BY EVENING WAS A LITTLE HIGHER THAN OPTIMAL FOR THUNDERSTORM DEVELOPMENT.

THIS GENERAL PATTERN WILL HOLD THROUGH THURSDAY WITH A SLIGHT CHANCE OF THUNDERSTORMS NEAR THE MOUNTAINS EACH AFTERNOON. SOME MODELS DO SHOW NOCTURNAL MOISTURE MOVING ACROSS SOUTHWESTERN SAN BERNARDINO AND WESTERN RIVERSIDE COUNTIES TONIGHT AND AGAIN WEDNESDAY NIGHT. SOME OF THE MODELS SPIT OUT SOME LIGHT PRECIPITATION...BUT THIS MAY ACTUALLY BE NOTHING MORE THAN MID LEVEL CLOUDS WITH SOME VIRGA OR SPRINKLES.

SOME MINOR DRYING IS POSSIBLE FOR FRIDAY AND SATURDAY WITH THE ECMWF SHOWING A RENEWED CHANCE FOR AFTERNOON THUNDERSTORMS IN THE MOUNTAINS AND DESERTS FOR SUNDAY AND MONDAY AFTERNOONS.

TEMPERATURES WILL PEAK TODAY...THEN COOL TO NEAR AVERAGE FOR FRIDAY THROUGH EARLY NEXT WEEK. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL BRING PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST AND WESTERN VALLEYS AT TIMES. WITH THE DECREASE IN HIGHER LEVEL MOISTURE...STRATUS COVERAGE HAS INCREASED OVER THE COASTAL WATERS...BUT NOT EXTENDING TO THE COAST EXCEPT ALONG PORTIONS OF THE ORANGE COUNTY COAST AND NEAR THE SOUTHERN SAN DIEGO COUNTY COAST.

 .AVIATION...
 300000Z...COAST/VALLEYS...SCT-BKN CLOUDS AOA 10000 FT MSL THROUGH WEDNESDAY MORNING. AREAS OF MARINE STRATUS THIS MORNING...MAINLY BETWEEN 10-15Z AND EXTENDING INLAND ONLY ABOUT 5 TO 8 SM...AND MAINLY FOR THE SAN DIEGO COUNTY COAST. BASES ARE EXPECTED TO BE 800 TO 1200 FT MSL WITH TOPS BLO 1500 FT MSL. THE STRATUS DECK WILL DISSIPATE BY 17Z. LOWER CLOUDS ARE NOT EXPECTED TO REACH KSNA. PATCHY MARINE STRATUS AGAIN LATE TONIGHT AND WEDNESDAY MORNING...SIMILAR CONDITIONS TO THIS MORNING.

MTS/DESERTS...SCT-BKN CLOUDS AOA 10000 FT MSL THROUGH TUE. CU/TCU DEVELOPING AFT 18Z THROUGH 22Z WITH ISOLATED SHRA/TSRA AND TOPS TO NEAR FL300. OCCASIONAL GUSTY DOWNDRAFT WINDS MAY RESULT IN STRONG SFC WIND GUSTS AND LLWS WITH PATCHY VIS RESTRICTIONS IN BLOWING DUST.

 .MARINE...
 100 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH SATURDAY.

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201506301032>

2/3

Fig A-8: An Area Forecast Discussion issued by the San Diego NWS office at 0232 am PST (0332 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-9 AREA FORECAST DISCUSSION FOR JUNE 30, 2015

10/25/2017

IEM :: AFD from NWS PSR

```

r
389
FXUS65 KPSR 301141
AFDPSR

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
440 AM MST TUE JUN 30 2015

...UPDATED AVIATION...

.SYNOPSIS...
OCCASIONAL SHOWERS AND THUNDERSTORMS WILL BE COMMON ACROSS THE
MOUNTAINS OF SOUTHERN AND EASTERN ARIZONA THROUGH MUCH OF THE WEEK.
THERE WILL BE SOME OPPORTUNITY FOR SHOWERS TO AFFECT LOWER ELEVATION
DESERT COMMUNITIES DURING THE MIDDLE OF THE WEEK...HOWEVER THE MOST
LIKELY OUTCOME IN THESE AREAS WILL ONLY BE GUSTY WINDS AND SOME
BLOWING DUST. AFTERNOON TEMPERATURES WILL REMAIN SLIGHTLY ABOVE
NORMAL THIS WEEK BEFORE MODERATING BACK DOWN TOWARDS NORMAL BY THE
WEEKEND.

##

.DISCUSSION...
SATELLITE IMAGERY THIS MORNING SHOWS CONSIDERABLE DEBRIS CLOUDS THAT
REMAIN OVER WESTERN ARIZONA AND SOUTHERN CALIFORNIA AS A RESULT OF
SEVERAL SMALLER THUNDERSTORM COMPLEXES THAT FORMED OVER ARIZONA
YESTERDAY EVENING. ACROSS SOUTHEAST AZ AND SOUTHWEST NM...A WEAK
UPPER LEVEL WAVE IS CONTINUING TO BREW THUNDERSTORM ACTIVITY THAT
WILL GRADUALLY DIMINISH AND MOVE OVER SONORA MEXICO BY SUNRISE.
SURFACE CONDITIONS IN MANY LOCATIONS OF THE LOWER DESERTS ARE
RUNNING A FEW DEGREES COOLER THAN YESTERDAY MORNING...ALL DUE TO
RAIN COOLED OUTFLOWS AND PRECIPITATION.

OPERATIONAL MODELS CONTINUE TO PLACE THE CENTER OF THE 594-5960M
ANTICYCLONE OVER UTAH TODAY...THE CENTER ELONGATING AND THE AXIS
TAKING ON A NW TO SE ORIENTATION OVER NEVADA AND INTO NEW MEXICO BY
WEDNESDAY AFTERNOON. AS THE HIGH REPOSITIONS...A WAVE OR TWO ROTATES
AROUND THE SOUTHERN PERIPHERY OF THE HIGH. THESE FEATURES WILL HELP
TO ENHANCE PRECIPITATION CHANCES TODAY AND WEDNESDAY...ALBEIT STILL
SLIGHT CHANCES FOR THE LOWER DESERTS...AND THE BEST CHANCES OVER THE
HIGHER TERRAIN EAST OF PHOENIX. DAYTIME TEMPERATURES THROUGH THE
MAJORITY OF THE WORK WEEK WILL REMAIN ON THE ABOVE-NORMAL SIDE...
RANGING 105-110F OR SO WITH FAIRLY MILD OVERNIGHTS.

THE UPPER LEVEL HIGH REMAINS IN A NW-SE ORIENTED FASHION THROUGH
FRIDAY. THIS CONFIGURATION WILL CONTINUE TO PROMOTE A LOW GRADE
MONSOON PATTERN AND DAILY CONVECTION DEPENDENT ON HOW INSTABILITY
MODIFIES OVER TIME. PRECIPITATION CHANCES DWINDLE A BIT THURSDAY
AND FRIDAY AS THE LOW LEVEL FLOW IS REALLY NOT CONDUCTIVE TO
IMPORTING RICHER MOISTURE INTO THE REGION. SO...THE BEST PRECIP
CHANCES WILL BE LIMITED TO HIGHER TERRAIN LOCATIONS DURING THIS TIME
FRAME AS MOISTURE MAY BEGIN TO MIX OUT AT LOWER ELEVATIONS.

HOWEVER...BY SATURDAY-SUNDAY...THE HIGH BEGINS TO SHIFT AND THE AXIS
ONCE AGAIN ALIGNING NORTH TO SOUTH OVER THE INTERMOUNTAIN WEST...
THE HIGH 500-300MB CENTERS STACKING/CO-LOCATING NEAR THE FOUR
CORNERS AREA. THIS IS A VERY FAVORABLE POSITION OF THE HIGH FOR
SOUTHEAST FLOW AND GOOD MOISTURE ADVECTION.

##

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KTMA...KSDL...
THUNDERSTORM CHANCES LATER THIS EVENING AND TONIGHT WILL BE THE
PRIMARY AVIATION CONCERN FOR CNTRL AZ TERMINALS. IN THE NEAR
TERM...ONLY SCT MID/HIGH CLOUDS AND ELY WINDS SWITCHING TO WLY BY
MID/LATE MORNING WILL LEAD TO LITTLE TO NO IMPACTS. ENOUGH MODEL
EVIDENCE EXISTS TO INCLUDE A VCTS MENTION LATE THIS EVENING. MUCH
LIKE LAST NIGHT...COVERAGE MAY BE QUITE LIMITED TO NOT DIRECTLY
AFFECT A SPECIFIC TERMINAL LOCATION...BUT POSSIBLY APPROACHES AND
DEPARTURE ROUTES.

SOUTHEAST CALIFORNIA AND SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...
THERE IS A SLIGHT CHANCE FOR AVIATION IMPACTS IN THE FORM OF SHRA
AND TSRA LATE IN THE PERIOD (WED MORNING) WITH ACTIVITY MOVING EAST
FROM ARIZONA. COVERAGE MAY BE LIMITED AND AND STORMS DECAYING SUCH
THAT ONLY A VCSH INTRODUCTION WAS JUSTIFIED. OTHERWISE...ONLY
MID/HIGH CLOUDS AND LIGHT S/SE SFC WINDS THROUGH THE AFTERNOON WILL
OFFER GOOD FLYING CONDITIONS IN THE SHORT TERM.

```

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201506301140>

2/3

Fig A-9: An Area Forecast Discussion issued by the Phoenix NWS office at 0340 am PST (0440 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-10

AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 1

10/25/2017

IEM :: AFD from NWS SGX

899
 FXUS66 KSGX 301607
 AFDGK

AREA FORECAST DISCUSSION
 NATIONAL WEATHER SERVICE SAN DIEGO CA
 907 AM PDT TUE JUN 30 2015

.SYNOPSIS...
 HIGH PRESSURE OVER THE GREAT BASIN AND LOW PRESSURE OFF THE CALIFORNIA AND BAJA COASTS WILL CONTINUE TO DIRECT A FLOW OF MID AND HIGH LEVEL MONSOONAL MOISTURE ACROSS SOUTHERN CALIFORNIA FOR MUCH OF THE WEEK INTO EARLY NEXT WEEK. THIS WILL SUPPORT A CHANCE OF THUNDERSTORMS THROUGH THURSDAY...MAINLY NEAR THE MOUNTAINS AND PORTIONS OF THE DESERTS DURING THE AFTERNOON HOURS. SOME SHOWERS AND THUNDERSTORMS COULD OCCUR IN THE EASTERN VALLEYS THIS AFTERNOON. MINOR DRYING IS POSSIBLE FOR FRIDAY AND SATURDAY WITH ANOTHER CHANCE FOR AFTERNOON THUNDERSTORMS FOR THE MOUNTAINS AND DESERTS SUNDAY AND MONDAY. TEMPERATURES WILL PEAK TODAY...THEN COOL TO NEAR TO SLIGHTLY BELOW AVERAGE FOR FRIDAY THROUGH EARLY NEXT WEEK. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL PRODUCE PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST AND WESTERN VALLEYS AT TIMES.

88

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

MORNING VISIBLE SATELLITE SHOWS SOME PATCHY MARINE LAYER STRATUS OVER THE COASTAL AREAS...SCATTERED-TO-FEW MID AND HIGH CLOUDS...AND TWO WEST-NORTHWESTWARD MOVING AREAS OF ELEVATED CONVECTION OVER SONORA AND BAJA. THESE AREAS OF CONVECTION SPIT OUT AN OUTFLOW BOUNDARY WHICH MAY CREATE SOME BRIEF LOCAL BLOWING DUST IN THE LOWER DESERTS AS IT MOVES THROUGH. THE 14Z HRRR SHOWS THE SECOND CONVECTIVE SYSTEM MOVING INTO THE SAN DIEGO COUNTY MOUNTAINS AND DESERTS BY 1 PM...AND THEN SPARKING OFF SOME THUNDERSTORMS OVER THE MOUNTAIN RIDGES. THE 12Z MIRAMAR SOUNDING SHOWS A MARINE LAYER INVERSION AT AROUND 600 FEET...WHICH IS RATHER SHALLOW. THUS...LOCAL FOG OCCURRED IN SOME OF THE COASTAL AREAS THIS MORNING. STRATUS/FOG SHOULD CLEAR OUT BY LATE MORNING. THE SOUNDING ALSO SHOWS A RESPECTABLE PRECIPITABLE WATER VALUE OF 1.43 INCHES...WITH 734 J/KG OF MUCAPE. HOWEVER...MOST OF THE MOISTURE IS ONCE AGAIN LOCATED ABOVE 600 MB...WHICH IS RATHER HIGH. NEVERTHELESS...SOME OF THE HIRRES MODELS DO SHOW SOME MOUNTAIN CONVECTION TAKING PLACE THIS AFTERNOON. WITH THE MID AND UPPER LEVEL WINDS OF 20-30 KT OUT OF THE SOUTHEAST...SOME ACTIVITY COULD SPILL INTO THE VALLEYS BEFORE DISSIPATING. THUS...WITH THE MORNING UPDATE...HAVE INTRODUCED A SLIGHT CHANCE OF THUNDERSTORMS INTO THE EASTERN SAN DIEGO AND RIVERSIDE COUNTY VALLEYS. THE WRF SHOWS THE CONVERGENCE BOUNDARY SETTING UP OVER THE MOUNTAIN RIDGES BY LATE MORNING...SO EXPECT ANY CONVECTION TO INITIATE THERE...WITH THUNDERSTORMS/SHOWERS THEN DRIFTING TO THE NORTHWEST INTO THE EASTERN VALLEYS BEFORE DISSIPATING. AS FAR AS TEMPERATURES GO...LOOKS LIKE TODAY WILL BE PRETTY WARM...WITH DAY-TIME HIGHS 5-10 DEGREES ABOVE NORMAL...DUE TO THE CLEARER SKIES AND HIGHER 500 MB HEIGHTS.

ON WATER VAPOR SATELLITE...A LARGE RIDGE REMAINS IN PLACE OVER THE GREAT BASIN...WITH A LOW FAR TO THE SOUTH-SOUTHWEST OF SAN DIEGO...RESULTING IN THE CONTINUED MOIST SOUTHEAST FLOW ALOFT. MODELS SHOW INDICATIONS THAT A WEAK EASTERLY WAVE COULD MOVE OVER THE AREA TONIGHT INTO WEDNESDAY MORNING...BRINGING A PLUME OF MID AND UPPER LEVEL MOISTURE. RIGHT NOW...THIS WAVE LOOKS TOO WEAK TO PRODUCE MEASURABLE PRECIPITATION. HOWEVER...THE INCREASING CLOUDS FROM THIS MID-TO-UPPER LEVEL MOISTURE SURGE COULD PLAY A FACTOR IN INHIBITTING LATE MORNING/AFTERNOON MOUNTAIN CONVECTION FOR WEDNESDAY...AS THE CLOUD COVER WOULD REDUCE DAY-TIME HEATING...AND THEREFORE DECREASE THE INSTABILITY. THE CLOUDS ALSO WILL PLAY A ROLE IN BRINGING OVERALL COOLER CONDITIONS TO THE FORECAST AREA.

THE FLOW BECOMES A LOT WEAKER ON THURSDAY AND FRIDAY...WHICH WOULD MEAN THAT STORMS WOULD BE SLOW-MOVING. HOWEVER...MOISTURE IS ALSO DIMINISHED ON THOSE DAYS...WITH THE GFS ONLY SHOWING UP TO 1.15 INCHES OF PRECIPITABLE WATER...AND THE NAM12 SHOWING 0.80 INCHES. COOLING WILL CONTINUE AS WELL AS THE RIDGE WEAKENS OVER OUR AREA...WITH DAY-TIME HIGHS REACHING NEAR TO SLIGHTLY BELOW NORMAL. THE SHALLOW MARINE LAYER WILL CONTINUE THROUGH FRIDAY...WITH NIGHT AND MORNING PATCHY STRATUS AND FOG OVER THE COAST AND EXTREME WESTERN VALLEYS.

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506301607>

2/3

FIGURE A-10

AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 2

10/25/2017

IEM :: AFD from NWS SGX

FOR SATURDAY THROUGH EARLY NEXT WEEK...THE RIDGE MOVES OVER THE FOUR CORNERS REGION...AND THE FLOW ALOFT TURNS SOUTHERLY. THE GFS SHOWS MOST OF THE MOISTURE DURING THIS PERIOD STAYING TO OUR EAST...WITH MINIMAL CHANCES FOR ANY AFTERNOON CONVECTION...WHILE THE ECMWF IS SLIGHTLY MORE MOIST...POSSIBLY ENOUGH FOR SOME AFTERNOON THUNDERSTORMS/SHOWERS OVER THE MOUNTAINS SUNDAY AND MONDAY. LOOK FOR TEMPERATURES TO CONTINUE TO BE NEAR TO SLIGHTLY BELOW NORMAL. THE MARINE LAYER SHOULD DEEPEN AND BECOME LESS PATCHY...WITH NIGHT AND MORNING STRATUS OVER THE COAST AND WESTERN VALLEYS.

##

.AVIATION...
301550Z...COAST/VALLEYS...LOW CLOUDS BASED AROUND 500-1000 FEET MSL...TOPS AROUND 1500 FEET MSL...AND DISSIPATING AROUND 1630Z. STRATUS REDEVELOPING OVERNIGHT TONIGHT WITH SIMILAR BASES AND TOPS. CONFIDENCE IN OCCURRENCE OF THE LOW CLOUDS IN THE KSN TAF FOR TONIGHT IS MODERATE-HIGH...AND CONFIDENCE IN THE TIMING IS MODERATE. SLIGHT CHANCE OF AFTERNOON AND EVENING SHOWERS/THUNDERSTORMS NEAR THE FOOTHILLS.

MTNS/DESERTS...CU/TCU DEVELOPING WITH A SLIGHT CHANCE OF AFTERNOON AND EVENING SHOWERS/THUNDERSTORMS. THUNDERSTORM TOPS TO NEAR 30000 FT MSL. LOCAL GUSTY SURFACE WINDS...AND LOCAL VIS RESTRICTIONS IN HEAVY RAIN POSSIBLE. CONFIDENCE IN OUTFLOW WINDS FROM MORNING THUNDERSTORMS OVER NORTHERN MEXICO REACHING THE DESERT TAFS IS MODERATE-HIGH...SO GUSTY WINDS INCLUDED IN THE KTRM TAF FOR THIS MORNING. RISK OF KTRM VISIBILITY FALLING BELOW 1 MILE IN BLOWING DUST IS VERY LOW.

##

.MARINE...
850 AM...NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH FRIDAY.

##

.SKYMARN...
THERE IS A CHANCE THAT SKYMARN ACTIVATION WILL BE NEEDED THIS AFTERNOON. WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

##

.SGX MATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.

##

\$\$

PUBLIC...HARRISON
AVIATION/MARINE...SMALL

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

Department of Agronomy
716 Farm House Ln
Ames, IA 50011

akherz@iastate.edu
515-294-5878 phone

 Facebook

 Twitter

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506301607>

3/3

Fig A-10: An Area Forecast Discussion issued by the San Diego NWS office at 0807 am PST (0907 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-11 AREA FORECAST DISCUSSION FOR JUNE 30, 2015

10/25/2017

IEM :: AFD from NWS PSR

694
 FXUS65 KPSR 301713
 AFDPSR

AREA FORECAST DISCUSSION
 NATIONAL WEATHER SERVICE PHOENIX AZ
 1012 AM MST TUE JUN 30 2015

.SYNOPSIS...
 OCCASIONAL SHOWERS AND THUNDERSTORMS WILL BE COMMON ACROSS THE MOUNTAINS OF SOUTHERN AND EASTERN ARIZONA THROUGH MUCH OF THE WEEK. THERE WILL BE SOME OPPORTUNITY FOR SHOWERS TO AFFECT LOWER ELEVATION DESERT COMMUNITIES DURING THE MIDDLE OF THE WEEK...HOWEVER THE MOST LIKELY OUTCOME IN THESE AREAS WILL ONLY BE GUSTY WINDS AND SOME BLOWING DUST. AFTERNOON TEMPERATURES WILL REMAIN SLIGHTLY ABOVE NORMAL THIS WEEK BEFORE MODERATING BACK DOWN TOWARDS NORMAL BY THE WEEKEND.

&&

.DISCUSSION...
 WESTERN CONUS WV IMAGERY THIS MORNING SHOWS THE BROAD RIDGE CIRCULATION OVER THE GREAT BASIN AND CARVING INTO PORTIONS OF THE GREAT PLAINS...WITH ML/HL MOISTURE STREAMING UP INTO SOUTHERN CA/GREAT BASIN AND SOMEWHAT DRIER AIR OVER PORTIONS OF TX/NM. BACK CLOSER TO HOME...CONVECTION CONTINUES OVER PORTIONS OF WESTERN PIMA COUNTY AND NORTHERN SONORA THIS AM...ALONG A WEAK INVERTED WAVE FEATURE AND AREA OF ENHANCED STEERING FLOW TRACKING ALONG THE INTL BORDER. FLOW, THE STRONGEST STORMS OVER THE LAST FEW HOURS HAVE GENERALLY REMAINED SOUTH OF THE BORDER...BUT HAVE SPREAD A HEALTHY LL MOISTURE INCREASE INTO THE YUMA AND IMPERIAL VALLEY AREAS WITH DEWPOINTS PUSHING 70F THIS MORNING. FIRST UPDATE FOR THE GRIDS THIS AM WAS TO INCLUDE ISOLATED THUNDERSTORM MENTION ACROSS SOUTHWEST AZ PUSHING INTO BEYOND THE CO RIVER VALLEY AND INTO SOUTHEAST CA FOR THE NEXT FEW HOURS. GIVEN THE EXCESS LL/ML MOISTURE...HEAVY RAINFALL ALONG WITH STRONG GUSTY WINDS ARE EXPECTED STORM THREATS WITH THE STRONGER...MORE ORGANIZED STORMS.

12Z RAORS PAINT AN INTERESTING LATE JUNE PICTURE ACROSS THE SOUTHWEST...AS 850MB DEWPOINTS ARE PUSHING 10C...KTWC HAS A 9C 700MB DEWPOINT...AND WINDS THROUGH THE 700-500MB STEERING LEVELS VARY FROM 20 TO 40KTS ACROSS SOUTHERN AND SOUTH-CENTRAL AZ. MORNING SOUNDINGS AROUND THE AREA TOUT ML CAPES IN THE 1000-1500 J/KG RANGE AND MUCAPES PUSHING 1500 J/KG...WHICH EVENTUALLY MAY MIX DOWN AROUND 1000 J/KG BY THE AFTERNOON THROUGHOUT THE AREA. IN ADDITION...MV LOOPS FROM ACROSS WEST TX THIS MORNING INDICATE SOME SORT OF ML VORT MAX/MCV QUICKLY HEADING WEST-SOUTHWESTWARD INTO CHIHUAHUA THIS AM. CURRENT TRAJECTORY OF THIS FEATURE HAS IT SINKING FURTHER INTO OLD MEXICO TODAY...BUT WITH DECENT EASTERLY STEERING FLOW...IT COULD CLIP PART OF THE REGION LATER TODAY AND CERTAINLY STAND TO HELP INITIATE AND PROLONG ANY OTHER CONVECTION THAT DOES DEVELOP ACROSS THE EASTERN THIRD/HIGHER TERRAIN PORTION OF THE STATE.

UPDATES TO THE SHORT TERM GRIDS INCLUDED FINE TUNING THE TIMING OF POPS ACROSS THE AREA AND ELEVATING CHANCES OVER THE OVERNIGHT HOURS TO INCLUDE CHANCE MENTIONING FOR THE LOWER DESERTS...INCLUDING PHOENIX...FOR THE EVENING HOURS. CURRENT THOUGHTS ARE CONDITIONS MAY BE SIMILAR TO THOSE FROM LAST EVENING...WITH SEVERAL OUTFLOW INTRUSIONS FROM PERIPHERAL STORMS TO MOVE INTO THE LOWER DESERTS TO HELP INITIATE ACTIVITY LATER INTO THE EVENING.

&&

.PREVIOUS DISCUSSION /ISSUED AT 328 AM MST/PDT...
 OPERATIONAL MODELS CONTINUE TO PLACE THE CENTER OF THE 594-595DM ANTICYCLONE OVER UTAH TODAY...THE CENTER ELONGATING AND THE AXIS TAKING ON A NW TO SE ORIENTATION OVER NEVADA AND INTO NEW MEXICO BY WEDNESDAY AFTERNOON. AS THE HIGH REPOSITIONS...A WAVE OR TWO ROTATES AROUND THE SOUTHERN PERIPHERY OF THE HIGH. THESE FEATURES WILL HELP TO ENHANCE PRECIPITATION CHANCES TODAY AND WEDNESDAY...ALBEIT STILL SLIGHT CHANCES FOR THE LOWER DESERTS...AND THE BEST CHANCES OVER THE HIGHER TERRAIN EAST OF PHOENIX. DAYTIME TEMPERATURES THROUGH THE MAJORITY OF THE WORK WEEK WILL REMAIN ON THE ABOVE-NORMAL SIDE...RANGING 105-110F OR SO WITH FAIRLY MILD OVERNIGHTS.

THE UPPER LEVEL HIGH REMAINS IN A NW-SE ORIENTED FASHION THROUGH FRIDAY. THIS CONFIGURATION WILL CONTINUE TO PROMOTE A LOW GRADE MONSOON PATTERN AND DAILY CONVECTION DEPENDENT ON HOW INSTABILITY MODIFIES OVER TIME. PRECIPITATION CHANCES DWINDLE A BIT THURSDAY AND FRIDAY AS THE LOW LEVEL FLOW IS REALLY NOT CONDUCTIVE TO

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201508301712>

2/4

Fig A-11: An Area Forecast Discussion issued by the Phoenix NWS office at 0912 am PST (1012 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-12 SPECIAL WEATHER STATEMENT FOR JUNE 30, 2015

10/25/2017

IEM :: SPS from NWS PSR

```

r
837
MMUS85 KPSR 301756
SPSPSR

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE PHOENIX AZ
1056 AM MST TUE JUN 30 2015

AZ020-025-026-CAZ031-033-301900-
LOWER COLORADO RIVER VALLEY AZ AZ-SOUTHWEST DESERTS AZ-
YUMA/MARTINEZ LAKE AND VICINITY AZ-IMPERIAL COUNTY CA-
LOWER COLORADO RIVER VALLEY CA CA-
1056 AM MST TUE JUN 30 2015

...SIGNIFICANT WEATHER ADVISORY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A

SIGNIFICANT WEATHER ADVISORY FOR...
WEST CENTRAL YUMA...SOUTHWESTERN LA PAZ AND SOUTHEASTERN IMPERIAL
COUNTIES

UNTIL NOON MST/NOON PDT/

AT 1055 AM MST /1055 AM PDT/...DOPPLER RADAR WAS TRACKING A STRONG
THUNDERSTORM 11 MILES EAST OF SAN LUIS...OR 12 MILES SOUTHEAST OF
SOMERTON...MOVING NORTHWEST AT 35 MPH.

HALF INCH HAIL...WINDS IN EXCESS OF 40 MPH AND BRIEF HEAVY RAINFALL
WILL BE POSSIBLE WITH THIS STORM.

LOCATIONS IMPACTED INCLUDE...
YUMA...SOMERTON...FORTUNA FOOTHILLS...GADSDEN...SAN LUIS...
HOLTVILLE...BLAISDELL...GORDON'S WELL...ANDRADE...LIGURTA...ARABY...
ALODONES DUNES...WINTERHAVEN...KINTER AND GLAMIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

FREQUENT CLOUD TO GROUND LIGHTNING IS OCCURRING WITH THIS STORM.
LIGHTNING CAN STRIKE 15 MILES AWAY FROM A THUNDERSTORM. SEEK A SAFE
SHELTER INSIDE A BUILDING OR VEHICLE.

STORM OUTFLOW WINDS MAY GENERATE AREAS OF BLOWING DUST AHEAD OF
THE STORM ACTIVITY. TRAVELERS IN THE AREA SHOULD BE PREPARED FOR
RAPIDLY CHANGING ROAD CONDITIONS AND REDUCTION IN VISIBILITY.

##

LAT...LON 3247 11474 3251 11482 3255 11479 3256 11481
3262 11481 3263 11478 3272 11472 3269 11518
3284 11544 3308 11509 3311 11464 3255 11409
3237 11442
TIME...MOT...LOC 1755Z 112DEG 35KT 3244 11460

$$

JN

```

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

Department of Agronomy
716 Farm House Ln
Ames, IA 50011

akrherz@iastate.edu
515-294-5978 phone

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=SPSPSR&e=201506301756>

2/2

Fig A-12: A Special Weather Statement issued by the Phoenix NWS office at 0956 am PST (1056 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-13 SPECIAL WEATHER STATEMENT FOR JUNE 30, 2015

11/13/2017

IEM :: SPS from NWS PSR

126
 MMUS85 KPSR 301901
 SPSPSR

SPECIAL WEATHER STATEMENT
 NATIONAL WEATHER SERVICE PHOENIX AZ
 1201 PM PDT TUE JUN 30 2015

CA2031-033-301945-
 IMPERIAL COUNTY CA-LOWER COLORADO RIVER VALLEY CA CA-
 1201 PM PDT TUE JUN 30 2015

...SIGNIFICANT WEATHER ADVISORY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A
 SIGNIFICANT WEATHER ADVISORY FOR...
 SOUTHERN IMPERIAL COUNTY

UNTIL 1245 PM PDT

AT 1159 AM PDT...DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM
 NEAR GORDON'S WELL...OR 20 MILES NORTHWEST OF GADSDEN...MOVING WEST
 AT 40 MPH.

WINDS IN EXCESS OF 40 MPH...PERIODS OF BRIEF HEAVY RAINFALL AND
 AREAS OF BLOWING DUST REDUCING VISIBILITIES AT OR BELOW 3 MILES
 WILL BE POSSIBLE WITH THIS STORM.

LOCATIONS IMPACTED INCLUDE...
 EL CENTRO...CALEXICO...BRAMLEY...IMPERIAL...HOLTVILLE...GORDON'S
 WELL...MT. SIGNAL...EL CENTRO NAVAL AIRFIELD...ALGODONES DUNES...
 BONDS CORNER...ALAMORIO...SEELEY...DIXIELAND...HEBER...WEST AND
 GLAMIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

FREQUENT CLOUD TO GROUND LIGHTNING IS OCCURRING WITH THIS STORM.
 LIGHTNING CAN STRIKE 15 MILES AWAY FROM A THUNDERSTORM. SEEK A SAFE
 SHELTER INSIDE A BUILDING OR VEHICLE.

TRAVELERS IN THE AREA SHOULD BE PREPARED FOR RAPIDLY CHANGING ROAD
 CONDITIONS AND REDUCED VISIBILITIES DUE TO EITHER BLOWING DUST AND
 SAND AS WELL OF POCKETS OF HEAVY RAINFALL.

##

LAT...LON 3319 11528 3280 11470 3270 11488 3264 11570
 3273 11588
 TIME...NOT...LOC 1859Z 102DEG 45KT 3275 11504

\$\$

3N

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

Department of Agronomy
716 Farm House Ln
Ames, IA 50011

akrherz@iastate.edu
515-294-5978 phone



<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=SPSPSR&e=201506301901>

2/2

Fig A-13: A Special Weather Statement issued by the Phoenix NWS office at 1101 am PST (1201 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-14 SPECIAL WEATHER STATEMENT FOR JUNE 30, 2015

11/13/2017 IEM :: SPS from NWS SGX

[iastate.edu](#)
[Index](#)
[Directory](#)
[Maps](#)
[Safety](#)
[Sign On](#)

Iowa State University
Iowa Environmental Mesonet

MENU SEARCH

National Weather Service Raw Text Product

Displaying AFOS PIL: SPSSGX Received: 2015-06-30 19:38 UTC

[Previous In Time](#)
[View All KSGX Products for 30 Jun 2015](#)
[Next In Time](#)
[Latest Product](#) [View As Image](#)

```

r
746
MMUS86 KSGX 301938
SPSSGX

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE SAN DIEGO CA
1238 PM PDT TUE JUN 30 2015

CA2050-058-062-302030-
SAN DIEGO COUNTY MOUNTAINS CA-SAN DIEGO COUNTY DESERTS CA-
SAN DIEGO COUNTY VALLEYS CA-
1238 PM PDT TUE JUN 30 2015

...SIGNIFICANT WEATHER ADVISORY FOR SOUTHEASTERN SAN DIEGO COUNTY
UNTIL 130 PM PDT...

AT 1237 PM PDT...DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM
NEAR CAMPO. THIS STORM WAS MOVING WEST-NORTHWEST AT 15 MPH.

WINDS IN EXCESS OF 40 MPH WILL BE POSSIBLE WITH THIS STORM.

LOCATIONS IMPACTED INCLUDE...
EL CAJON...RAMONA...ALPINE...I-8 BETWEEN PINE VALLEY AND BOULEVARD...
MOUNT LAGUNA...CUYAMACA RANCHO STATE PARK...LAKE MORENA...Hwy S1
BETWEEN LAKE CUYAMACA AND MOUNT LAGUNA...PINE VALLEY...SAN DIEGO
COUNTRY ESTATES...PORTRERO...DESCANSO...LAKE CUYAMACA...CAMPO...Hwy
S2 BETWEEN SHELTER VALLEY AND AGUA CALIENTE...Hwy 79 BETWEEN JULIAN
AND LAKE CUYAMACA...SOUTHWESTERN BOULEVARD...CREST...LAKESIDE AND
CAPTAIN GRANDE INDIAN RESERVATION.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

TORRENTIAL RAINFALL IS ALSO OCCURRING WITH THIS STORM...AND MAY LEAD
TO MINOR ROAD FLOODING. DO NOT DRIVE YOUR VEHICLE THROUGH FLOODED
ROADWAYS.

FREQUENT CLOUD TO GROUND LIGHTNING IS OCCURRING WITH THIS STORM.
LIGHTNING CAN STRIKE 15 MILES AWAY FROM A THUNDERSTORM. SEEK A SAFE
SHELTER INSIDE A BUILDING OR VEHICLE.

##

LAT...LON 3302 11685 3305 11644 3260 11628 3256 11604
TIME...MOT...LOC 1937Z 180DEG 0KT 3293 11656

$$

HARRISON
  
```

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=SPSSGX&e=201506301938>

1/2

Fig A-14: A Special Weather Statement issued by the Phoenix NWS office at 1138 am PST (1238 am PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at <https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-15

AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 1

10/25/2017

IEM :: AFD from NWS SGX

233
FXUS66 KSGX 302114
AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
214 PM PDT TUE JUN 30 2015

.SYNOPSIS...

A DISTURBANCE MOVING THROUGH THE AREA WILL CONTINUE TO PRODUCE SHOWERS AND THUNDERSTORMS THIS AFTERNOON...MAINLY IN SAN DIEGO COUNTY...WITH MORE SHOWERS AND THUNDERSTORMS POSSIBLE FOR MOST AREAS LATE TONIGHT INTO WEDNESDAY MORNING DUE TO ANOTHER DISTURBANCE PASSING THROUGH. ANY THUNDERSTORMS THAT OCCUR IN THE LOWER ELEVATIONS COULD PRODUCE DRY LIGHTNING STRIKES. HIGH PRESSURE OVER THE GREAT BASIN AND LOW PRESSURE OFF THE CALIFORNIA AND BAJA COASTS WILL CONTINUE TO DIRECT A FLOW OF MID AND HIGH LEVEL MONSOONAL MOISTURE ACROSS SOUTHERN CALIFORNIA FOR MUCH OF THE WEEK INTO EARLY NEXT WEEK. THIS WILL SUPPORT A CHANCE OF THUNDERSTORMS THROUGH THURSDAY...MAINLY NEAR THE MOUNTAINS AND PORTIONS OF THE DESERTS DURING THE AFTERNOON HOURS. MINOR DRYING IS POSSIBLE FOR SATURDAY WITH ANOTHER CHANCE FOR AFTERNOON THUNDERSTORMS FOR THE MOUNTAINS AND DESERTS SUNDAY AND MONDAY. TEMPERATURES WILL PEAK TODAY...THEN COOL TO NEAR TO SLIGHTLY BELOW AVERAGE FOR FRIDAY THROUGH EARLY NEXT WEEK. A SHALLOW MARINE LAYER AND WEAK ONSHORE FLOW WILL PRODUCE PATCHY NIGHT AND MORNING LOW CLOUDS AND FOG NEAR THE COAST AND WESTERN VALLEYS AT TIMES.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

AFTERNOON RADAR SHOWS VERY ACTIVE THUNDERSTORM ACTIVITY OVER SAN DIEGO COUNTY THIS AFTERNOON...AS THE DISTURBANCE FROM EARLIER THAT WAS OVER NORTHERN BAJA AND SONORA MEXICO HAS SPARKED NUMEROUS THUNDERSTORMS...SOME OF WHICH PROMPTED SEVERE THUNDERSTORM WARNINGS. THE THUNDERSTORMS SHOULD DIE OFF BY THIS EVENING AFTER THE DISTURBANCE MOVES OFF TO THE WEST.

ON WATER VAPOR SATELLITE...A LARGE RIDGE REMAINS IN PLACE OVER THE GREAT BASIN...WITH A LOW FAR TO THE SOUTH-SOUTHWEST OF SAN DIEGO...RESULTING IN THE CONTINUED MOIST SOUTHEAST FLOW ALOFT. MODELS SHOW INDICATIONS THAT AN EASTERLY WAVE COULD MOVE OVER THE AREA TONIGHT INTO WEDNESDAY MORNING...BRINGING A PLUME OF MID AND UPPER LEVEL MOISTURE. RECENT MODEL RUNS SHOW THE THIS WAVE PRODUCING WIDESPREAD SHOWERS AND SPRINKLES...WITH POSSIBLE THUNDERSTORMS...LATE TONIGHT THROUGH WEDNESDAY MORNING FOR MOST OF THE AREA...SO THE FORECAST HAS BEEN ADJUSTED FOR THIS.

THE INCREASING CLOUDS FROM THIS MID-TO-UPPER LEVEL MOISTURE SURGE COULD PLAY A FACTOR IN INHIBITING LATE MORNING/AFTERNOON MOUNTAIN CONVECTION FOR WEDNESDAY...AS THE CLOUD COVER WOULD REDUCE DAY-TIME HEATING...AND THEREFORE DECREASE THE INSTABILITY. THE CLOUDS ALSO WILL PLAY A ROLE IN BRINGING OVERALL COOLER CONDITIONS TO THE FORECAST AREA.

THE FLOW BECOMES A LOT WEAKER ON THURSDAY AND FRIDAY...WHICH WOULD MEAN THAT STORMS WOULD BE SLOW-MOVING. HOWEVER...MOISTURE IS ALSO DIMINISHED ON THOSE DAYS...WITH THE GFS ONLY SHOWING UP TO 1.15 INCHES OF PRECIPITABLE WATER...AND THE NAM12 SHOWING 0.80 INCHES. COOLING WILL CONTINUE AS WELL AS THE RIDGE WEAKENS OVER OUR AREA...WITH DAY-TIME HIGHS REACHING NEAR TO SLIGHTLY BELOW NORMAL. THE SHALLOW MARINE LAYER WILL CONTINUE THROUGH FRIDAY...WITH NIGHT AND MORNING PATCHY STRATUS AND FOG OVER THE COAST AND EXTREME WESTERN VALLEYS.

FOR SATURDAY THROUGH EARLY NEXT WEEK...THE RIDGE MOVES OVER THE FOUR CORNERS REGION...AND THE FLOW ALOFT TURNS SOUTHERLY. THE GFS SHOWS MOST OF THE MOISTURE DURING THIS PERIOD STAYING TO OUR EAST...WITH MINIMAL CHANCES FOR ANY AFTERNOON CONVECTION...WHILE THE ECMWF IS SLIGHTLY MORE MOIST...POSSIBLY ENOUGH FOR SOME AFTERNOON THUNDERSTORMS/SHOWERS OVER THE MOUNTAINS SUNDAY AND MONDAY. LOOK FOR TEMPERATURES TO CONTINUE TO BE NEAR TO SLIGHTLY BELOW NORMAL. THE MARINE LAYER SHOULD DEEPEN AND BECOME LESS PATCHY...WITH NIGHT AND MORNING STRATUS OVER THE COAST AND WESTERN VALLEYS.

&&

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506302114>

2/3

FIGURE A-15 AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 2

10/25/2017 IEM :: AFD from NWS SGX

.AVIATION...
302050Z...COAST/VALLEYS... AFTERNOON AND EVENING
SHOWERS/THUNDERSTORMS...DECREASING DURING THE NIGHT. LOW CLOUDS
BASED AROUND 500-1000 FEET MSL...TOPS AROUND 1500 FEET MSL OVER THE
COASTAL WATERS...MOVING INLAND OVERNIGHT. CONFIDENCE IN OCCURRENCE
OF THE LOW CLOUDS IN THE KSN TAF FOR TONIGHT IS MODERATE...AND
CONFIDENCE IN THE TIMING IS MODERATE.

MTNS/DESERTS...AFTERNOON AND EVENING SHOWERS/THUNDERSTORMS.
THUNDERSTORM TOPS TO NEAR 5000 FT MSL. LOCAL GUSTY SURFACE
WINDS...AND LOCAL VIS RESTRICTIONS IN HEAVY RAIN POSSIBLE. SHOWERS
AND THUNDERSTORMS DECREASING DURING THE NIGHT.

##

.MARINE...
150 PM...SHOWERS AND THUNDERSTORMS DECREASING DURING THE
NIGHT...OTHERWISE NO HAZARDOUS MARINE WEATHER IS EXPECTED THROUGH
FRIDAY.

##

.BEACHES...
150 PM...SHOWERS AND THUNDERSTORMS DECREASING DURING THE
NIGHT. FREQUENT LIGHTNING POSSIBLE DURING THUNDERSTORMS.

##

.SKYMARN...
SKYMARN ACTIVATION IS REQUESTED FOR SAN DIEGO COUNTY. SKYMARN
ACTIVATION MAY BE NECESSARY FOR THE OTHER COUNTIES THIS AFTERNOON.

##

.SOX WATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.

##

\$\$

PUBLIC...HARRISON
AVIATION/MARINE...SMALL

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

Department of Agronomy
716 Farm House Ln
Ames, IA 50011

akrherz@iastate.edu
515-294-5978 phone

 Facebook

 Twitter

 Github

 YouTube

 RSS

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201506302114>

3/3

Fig A-15: An Area Forecast Discussion issued by the San Diego NWS office at 0114 am PST (0214 pm PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-16

AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 1

10/25/2017

IEM :: AFD from NWS SGX

r
 611
 FXUS66 KSGX 010440
 AFDSGX

AREA FORECAST DISCUSSION
 NATIONAL WEATHER SERVICE SAN DIEGO CA
 930 PM PDT TUE JUN 30 2015

.SYNOPSIS...
 MOISTURE IN SOUTHEAST FLOW ALOFT AND AN UPPER LEVEL DISTURBANCE WILL BRING A CHANCE OF THUNDERSTORMS LATE TONIGHT THROUGH WEDNESDAY OVER THE ENTIRE REGION. BRIEF HEAVY RAIN...GUSTY WINDS AND CLOUD-TO-GROUND LIGHTNING STRIKES WILL BE POSSIBLE. OTHERWISE...HUMID CONDITIONS WILL CONTINUE WITH VERY WARM TO HOT WEATHER THROUGH WEDNESDAY. A SLIGHT COOLING TREND WILL OCCUR STARTING THURSDAY...MAINLY WEST OF THE MOUNTAINS...AND THUNDERSTORMS CHANCES WILL DECREASE. BY THE WEEKEND...DRY WEATHER SHOULD PREVAIL WITH TEMPERATURES NEAR SEASONAL NORMALS. LOW CLOUDS WILL RETURN TO COASTAL AREAS BY THURSDAY AND CONTINUE THROUGH EARLY NEXT WEEK.

..
 .DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

THINGS CALMED DOWN AFTER LATE AFTERNOON AS THE UPPER WAVE MOVED WEST AND AN AREA OF SUBSIDENCE OCCURRED BEHIND THE WAVE. TEMPERATURES SPIKED AS THE SEA BREEZE WAS INTERRUPTED...RESULTING IN MIRAMAR REACHING 91 AT 6 PM AND JOHN WAYNE AIRPORT REACHING 86 AT 8 PM. AT MID-EVENING...A MESOSCALE CONVECTIVE COMPLEX WAS MOVING WEST OVER SONORA AND FAR SOUTHERN ARIZONA...WITH SCATTERED THUNDERSTORMS OVER CENTRAL ARIZONA AND ISOLATED CELLS IN FAR EASTERN SAN BERNARDINO/RIVERSIDE COUNTIES WHICH SHOULD DRIFT WEST. THERE IS SOME WEAKENING OF THE ARIZONA/SONORA STORMS...BUT THE MCS APPEARS TO BE HOLDING TOGETHER WELL ENOUGH TO SEND OUTFLOW INTO SOUTHEASTERN CALIFORNIA. THE YUMA OBSERVATION THE NEXT FEW HOURS WILL BE CRITICAL FOR POSSIBILITY OF GUSTY SOUTHEAST WINDS AND/OR BLOW DUST IN OUR DESERTS. THIS COULD ALSO RESULT IN THUNDERSTORM DEVELOPMENT LATE TONIGHT OVER OUR AREA ALONG THE LEADING EDGE OF THE OUTFLOW...AND ANOTHER WAVE MOVING WEST THROUGH SONORA/SOUTHERN ARIZONA LATE TONIGHT AND INTO NORTHERN BAJA EARLY WED COULD RESULT IN FURTHER ACTIVITY. EXACT LOCATION OF THUNDERSTORMS IS DIFFICULT TO DETERMINE...BUT THEY AGAIN COULD OCCUR ANYWHERE FROM THE COASTAL WATERS EAST TO THE DESERTS. IF CLOUD COVER IS LOW ENOUGH...THERE COULD BE ADDITIONAL AFTERNOON CONVECTION WEDNESDAY OVER THE MOUNTAINS AND DESERT SLOPES AS NEAR AND A LITTLE EAST OF THE MOUNTAIN CRESTS IS WHERE THE SURFACE CONVERGENCE WILL BE. MAIN THREATS WILL BE BRIEF HEAVY RAIN...GUSTY WINDS AND LIGHTNING STRIKES...MUCH LIKE TODAY. THE MID-LEVEL WINDS WILL CONTINUE TO BE RATHER STRONG...20-25 KNOTS...SO FLASH FLOOD THREAT WILL MOSTLY BE LOW...THOUGH ANY TRAINING...OR ANY THUNDERSTORMS OVER THE LAKE FIRE BURN AREA IN SAN BERNARDINO COUNTY...COULD RESULT IN ISOLATED FLOODING. IT SHOULD BE HOT AGAIN IN MOST AREAS WEDNESDAY...THOUGH SOME PLACES WILL COOL A FEW DEGREES WEST OF THE MOUNTAINS AS A PRECURSOR TO A MORE NOTABLE COOLING TREND THURSDAY.

THUNDERSTORM CHANCES SHOULD LOWER THU/FRI AS THE MID-LEVEL MOISTURE DECREASES...AND 00Z NAM INDICATES PROBABLY NO TSTORMS WILL OCCUR AT ALL FRIDAY. ALSO...THE SURFACE CONVERGENCE LINES SHIFT FURTHER EAST EACH DAY AND WILL BE WELL INTO THE DESERT BY FRIDAY AS ONSHORE FLOW INCREASES. IN FACT...GUSTY WINDS WILL OCCUR IN SOME MTH/DESERT AREAS...ESPECIALLY THROUGH SAN GORGONIO PASS AND ON THE DESERT FOOTHILLS. RIGHT NOW...THE WEEKEND LOOKS DRY AS THE FLOW BETWEEN THE TROUGH TO OUR WEST AND THE RIDGE TO OUR NORTHEAST WILL RESULT IN MOSTLY DRY SSM FLOW. SOME MODEL RUNS HAVE SHOWN MONSOONAL FLOW IN OUR EASTERN AREAS EARLIER FOR SUNDAY/MONDAY...BUT MOST SOLUTIONS ARE TRENDING DRIER NOW. OVERALL...TEMPS LOOK SEASONAL OVER THE WEEKEND AND EARLY NEXT WEEK...AND WITH ONSHORE FLOW PREVAILING AND THE TROUGH TO OUR WEST...THERE SHOULD BE MODERATE AMOUNTS OF MARINE LAYER STRATUS...THOUGH PROBABLY NOT EXTENSIVE DUE TO THE RENEWED RISE IN LOCAL SEA SURFACE TEMPERATURES.

..
 .AVIATION...
 010000Z...SCT CLOUDS AOA 150...BECOMING BKN-OVC150 AFT 00Z WITH SCT -SHRA AND ISOLD TSRA POSSIBLE WITH TOPS TO FL300 AFT 10Z. CONFIDENCE IN MARINE STRATUS DEVELOPMENT OVERNIGHT IS LOW AND HAS BEEN REMOVED FROM THE COASTAL TAF SITES...BUT PATCHY CLOUDS WITH BASES 600-900 FT

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201507010430>

2/3

FIGURE A-16

AREA FORECAST DISCUSSION FOR JUNE 30, 2015 – PAGE 2

10/25/2017

IEM :: AFD from NWS SGX

MSL AND TOPS NEAR 1K FT MSL ARE STILL POSSIBLE NEAR THE COAST...
ALONG WITH LOCAL VIS RESTRICTIONS IN BR/HZ AFT 10Z THROUGH 15Z.
CONFIDENCE IS LOW FOR PLACEMENT AND TIMING OF SHRS/TSTMS THROUGH
WED...BUT DEVELOPMENT IS POSSIBLE ANY TIME AFTER 09Z TONIGHT. THE
BEST CHANCE FOR TSTMS WILL BE WITH DAYTIME HEATING WED AFTERNOON.

THROUGH AND BELOW THE SAN GORGONIO PASS...WEST WINDS 20 KT WITH
GUSTS TO 35 KTS THROUGH 11Z WITH ASSOCIATED LLWS AND UDDFS.

##

.MARINE... 800 PM...SLIGHT CHANCE OF THUNDERSTORMS LATE TONIGHT AND
ON WEDNESDAY...OTHERWISE NO HAZARDOUS MARINE WEATHER IS EXPECTED
THROUGH FRIDAY.

##

.BEACHES... 800 PM...THERE WILL BE ANOTHER CHANCE OF THUNDERSTORMS
AT THE BEACHES ON WED. CLOUD-TO-GROUND LIGHTNING STRIKES WILL BE
POSSIBLE.

##

.SKYWARN...
SKYWARN ACTIVATION IS REQUESTED FOR SAN DIEGO COUNTY. SKYWARN
ACTIVATION MAY BE NECESSARY FOR THE OTHER COUNTIES THIS AFTERNOON.

##

.SGX MATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.

##

\$\$

PUBLIC...MAXWELL
AVIATION/MARINE/BEACHES...JAD

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

Department of Agronomy
716 Farm House Ln
Ames, IA 50011
akrherz@iastate.edu
515-294-5978 phone

 Facebook

 Twitter

 Github

 YouTube

 RSS

Copyright © 2001-2017
Iowa State University
of Science and Technology
All rights reserved.

Non-discrimination Policy

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201507010430>

3/3

Fig A-16: An Area Forecast Discussion issued by the San Diego NWS office at 0830 am PST (0930 pm PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-17 SPECIAL WEATHER STATEMENT FOR JUNE 30, 2015

10/25/2017 IEM :: SPS from NWS PSR

[iastate.edu](#)
[Index](#)
[Directory](#)
[Maps](#)
[Safety](#)
[Sign On](#)

Iowa State University
Iowa Environmental Mesonet

MENU SEARCH

National Weather Service Raw Text Product

Displaying AFOS PIL: SPSPSR Received: 2015-07-01 04:53 UTC

[Previous In Time](#)
[View All KPSR Products for 01 Jul 2015](#)
[Next In Time](#)
[Latest Product](#) [View As Image](#)

```

r
541
MMJUS85 KPSR 010453
SPSPSR

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE PHOENIX AZ
953 PM MST TUE JUN 30 2015

AZZ021-022-010545-
NORTHWEST MARICOPA COUNTY AZ-WEST CENTRAL DESERTS AZ-
953 PM MST TUE JUN 30 2015

...SIGNIFICANT WEATHER ADVISORY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A
SIGNIFICANT WEATHER ADVISORY FOR...
NORTHEASTERN LA PAZ AND NORTHWESTERN MARICOPA COUNTIES

UNTIL 1045 PM MST

AT 953 PM MST...DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM 8
MILES EAST OF AGUILA...OR 15 MILES WEST OF WICKENBURG...MOVING WEST
AT 30 MPH.

WINDS IN EXCESS OF 40 MPH WILL BE POSSIBLE WITH THIS STORM.

LOCATIONS IMPACTED INCLUDE...
AGUILA AND GLADDER.

A SEVERE THUNDERSTORM WATCH REMAINS IN EFFECT UNTIL MIDNIGHT MST FOR
SOUTH CENTRAL ARIZONA.

LAT...LOM 3411 11333 3400 11333 3400 11290 3387 11290
3386 11353 3413 11353
TIME...MOT...LOC 0453Z 091DEG 26KT 3399 11303

$$

MH
  
```

**IOWA STATE
UNIVERSITY**

College of Ag
Department of Agronomy

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=SPSPSR&e=201507010453>

1/1

Fig A-17: A Special Weather Statement issued by the Phoenix NWS office at 0853 pm PST (0953 pm PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at <https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-18 SPECIAL WEATHER STATEMENT FOR JUNE 30, 2015

10/25/2017 IEM :: SPS from NWS PSR

[iastate.edu](#)
[Index](#)
[Directory](#)
[Maps](#)
[Safety](#)
[Sign On](#)

Iowa State University
Iowa Environmental Mesonet

MENU SEARCH

National Weather Service Raw Text Product

Displaying AFOS PIL: SPSPSR Received: 2015-07-01 05:05 UTC

[Previous In Time](#)
[View All KPSR Products for 01 Jul 2015](#)
[Next In Time](#)
[Latest Product](#) [View As Image](#)

```

r
953
MMJ585 KPSR 010505
SPSPSR

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE PHOENIX AZ
1005 PM MST TUE JUN 30 2015

A22820-021-010600-
LOWER COLORADO RIVER VALLEY AZ AZ-WEST CENTRAL DESERTS AZ-
1005 PM MST TUE JUN 30 2015

...SIGNIFICANT WEATHER ADVISORY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A

SIGNIFICANT WEATHER ADVISORY FOR...
CENTRAL LA PAZ COUNTY

UNTIL 1100 PM MST

AT 1005 PM MST...DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM
NEAR BOUSE...OR 26 MILES SOUTHEAST OF PARKER...MOVING WEST AT 40 MPH.

WIND GUSTS UP TO 50 MPH WILL BE POSSIBLE WITH THIS STORM.

LOCATIONS IMPACTED INCLUDE...
BOUSE.

LAT...LON 3395 11383 3377 11384 3373 11437 3403 11436
TIME...MOT...LOC 0505Z 0920EG 34KT 3387 11394

$$

MH
  
```

IOWA STATE UNIVERSITY
 College of Ag
 Department of Agronomy

Department of Agronomy
 716 Farm House Ln
 Ames, IA 50011


<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=SPSPSR&e=201507010505>

1/1


Fig A-18: A Special Weather Statement issued by the Phoenix NWS office at 0905 pm PST (1005 pm PDT) on Tuesday, June 30, 2015. Source: Iowa State University; Iowa Environmental Mesonet at <https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201504240455>

FIGURE A-19
WEATHER BRIEFING FOR JUNE 30, 2015


NATIONAL WEATHER SERVICE
PHOENIX, AZ FORECAST OFFICE
WEATHER BRIEFING



<http://www.weather.gov/phoenix>



Issued: Tuesday, June 30, 2015 at 12 PM
Valid: Through Wednesday, July 1, 2015
Outlook included through Sunday, July 5, 2015



Synopsis: The possibility of mountain showers and thunderstorms moving into the populated lower deserts of Arizona will continue today and tomorrow, then decrease Thursday through Saturday. Another resurgence is possible Sunday into early next week.

Hazards/Impacts:

- **Wind** - Localized winds under the strongest storms will be capable of producing damage. *Confidence: High*
- **Dust** – Areas of western Maricopa and all of Yuma and La Paz counties will experience blowing dust from thunderstorm outflow winds in the late afternoon through evening window. This will impact travel on the I-8 and I-10 corridors. *Confidence: High*
- **Floods** – Storms will have a decent forward speed, thus the risk of flooding is low. *Confidence: Moderate*

Fig A-19: A weather briefing issued by the NWS Phoenix office at 12:00 MST on June 30 advising of winds capable of producing damage and creating blowing dust. La Paz and Yuma counties border Imperial County on the east. As discussed in the document, Yuma, Arizona was directly upstream from Niland during the wind event. Even though this notice was issued after Niland was impacted by dust, Yuma MCAS did report blowing dust hours earlier. Some of this dust was transported downstream to Niland

FIGURE A-20 DESCRIPTIVE TEXT FOR SMOKE/DUST OBSERVED

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY

SMOKE

Alaska to the Mid Atlantic:

An unbroken area of smoke from the prolific number of wildfires over Alaska and central/northern Canada stretches across the width of Alaska and into Canada. The smoke covers nearly all of Canada from Hudson Bay to eastern British Columbia and dives south into the central US, from northern Montana across North Dakota and into Minnesota where the smoke curves southward across most of the Mississippi, Tennessee and Ohio Valleys and into the Mid Atlantic states and southern New York. The smoke also reaches back into eastern Oklahoma and southeast Kansas. Embedded within this tremendous area of smoke area very large areas of moderately dense to dense smoke, which likewise stretches across most of the length of the smoke area from Alaska through most of central Canada down into the mid section of the US and then eastward to the Mid Atlantic.

DUST

A broad area of Saharan dust was seen covering much of the southern half of the Gulf of Mexico and the Caribbean.

Small areas of light blowing dust were detected over the desert regions of southern California this afternoon.

Ruminski

THIS TEXT PRODUCT IS PRIMARILY INTENDED TO DESCRIBE SIGNIFICANT AREAS OF SMOKE ASSOCIATED WITH ACTIVE FIRES AND SMOKE WHICH HAS BECOME DETACHED FROM THE FIRES AND DRIFTED SOME DISTANCE AWAY FROM THE SOURCE FIRE..TYPICALLY OVER THE COURSE OF ONE OR MORE DAYS. AREAS OF BLOWING DUST ARE ALSO DESCRIBED. USERS ARE ENCOURAGED TO VIEW A GRAPHIC DEPICTION OF THESE AND OTHER PLUMES WHICH ARE LESS EXTENSIVE AND STILL ATTACHED TO THE SOURCE FIRE IN VARIOUS GRAPHIC FORMATS ON OUR WEB SITE:

JPEG: <http://www.ospo.noaa.gov/Products/land/hms.html>

GIS: <http://www.firedetect.noaa.gov/viewer.htm>

KML: <http://www.ssd.noaa.gov/PS/FIRE/kml.html>

ANY QUESTIONS OR COMMENTS REGARDING THIS PRODUCT SHOULD BE SENT TO
SSDFireTeam@noaa.gov

Unless otherwise indicated:

- Areas of smoke are analyzed using GOES-EAST and GOES-WEST Visible satellite imagery.
- Only a general description of areas of smoke or significant smoke plumes will be analyzed.
- A quantitative assessment of the density/amount of particulate or the vertical distribution is not included.
- Widespread cloudiness may prevent the detection of smoke even from significant fires.

Fig A-20: This is an excerpt from a Smoke Text Product issued by NOAA's Satellite Services Division that identified blowing dust over desert regions in southern California. The release in this instance was not time stamped, but carried a release time of 0648 UTC on July 1, 2015, which translates into 11:48 PDT. These notices are meant as a summary of events and not for real time updates. Source:

<http://www.ssd.noaa.gov/PS/FIRE/DATA/SMOKE/2015/2015G010648.html>

FIGURE A-21 IMPERIAL VALLEY PRESS ARCHIVE

10/26/2017

News archive search

Protection Agency stated a press release from the EPA.

Monitoring of rivers, lakes and coastal waters in California continue to show harmful pollutant levels, based on updates to the list from three of the state's nine regional Water Quality Control Boards — North Coast, Lahontan and...

[Click here to purchase article \(\\$2.95\)](#) **BUY**

[Significant weather advisory for southern Imperial County](#) Author: Staff Writer

Date: June 30, 2015

Publication: Imperial Valley Press (El Centro, CA)

The National Weather Service in Phoenix has issued a significant weather advisory for southern Imperial County until 12:45 p.m. At 11:59 am, Doppler radar was tracking a strong thunderstorm near Gordon's well, or 20 miles northwest of Gadsden, moving west at 40 mph.

Winds in excess of 40 mph, periods of brief heavy rainfall and areas of blowing dust reducing visibilities at or below 3 miles will be possible with this storm.

Locations impacted include: El Centro, Calexico, Brawley,...

[Click here to purchase article \(\\$2.95\)](#) **BUY**

[\[View the previous 10 items\]](#) [\[View the next 10 items\]](#)

© Copyright Schurz Communications A Schurz Communications company

http://nl.newsbank.com/nl-search/we/Archives?p_action=list&p_topdoc=51

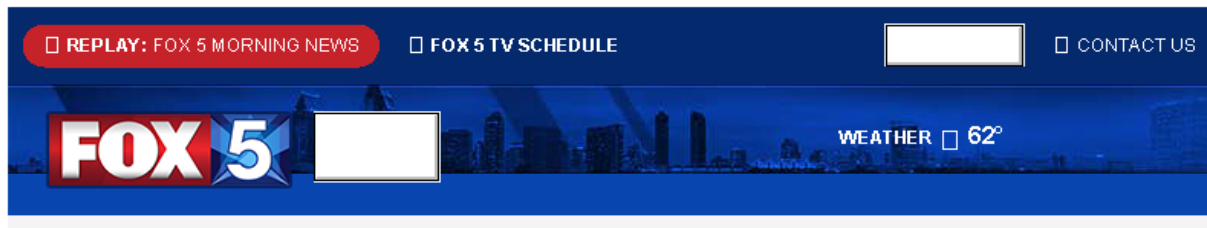
3/3

Fig A-21: The Imperial Valley Press Archive of Significant Weather Advisory of Southern Imperial County

http://nl.newsbank.com/nl-search/we/Archives?p_action=list&p_topdoc=51

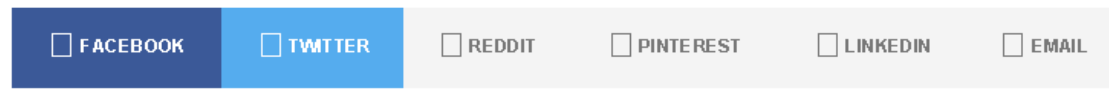
FIGURE A-22
FOX 5 ARTICLE THUNDERSTORMS SAN DIEGO – PAGE 1

Thunderstorm lets loose on San Diego | FOX5 San Diego - San Diego News, Weather, Traffic and Sports | KSWB



Thunderstorm lets loose on San Diego

POSTED 4:02 PM, JUNE 30, 2015, BY [FOX 5 DIGITAL TEAM](#), UPDATED AT 10:22PM, JUNE 30, 2015



SAN DIEGO -- Intense summer thunderstorms rolled through the San Diego area Tuesday, letting loose with some heavy downpours, putting on lightning displays that sparked a spate of small brush fires and prompting authorities to clear swimmers and surfers out of the ocean.

<http://fox5sandiego.com/2015/06/30/thunderstorm-lets-loose-on-san-diego/>[3/18/2016 10:53:08 AM]

FIGURE A-22
FOX 5 ARTICLE THUNDERSTORMS SAN – PAGE 2

Thunderstorm lets loose on San Diego | FOX5 San Diego - San Diego News, Weather, Traffic and Sports | KSWB

The afternoon squalls resulted in hundreds of lightning strikes in the county, according to the National Weather Service. The electrical activity caused no reported injuries but set patches of vegetation ablaze in fields and on hillsides in such areas as Campo, Poway and Vista.

The conditions, generated by monsoonal moisture out of Mexico, extended from the deserts to the coast. In the mid-afternoon, the threat of lightning strikes led lifeguards in San Diego, Coronado and other locales to direct beachgoers out of the surf until the storm passed.

[@fox5sandiego pic.twitter.com/85nHoLUiG](https://twitter.com/fox5sandiego/pic.twitter.com/85nHoLUiG)

— Cody Barbo (@codybarbo) [June 30, 2015](#)

Krissy Perrine of Rainbow was taking video of the storm from inside her house when a lightning bolt struck the ground and shocked her.

"It shocked me, electrically not emotionally, but didn't burn," Perrine told FOX5. "It was crazy up here. Thought there was a tornado as the wind was so bad."

"It was pretty intense for a while here," NWS meteorologist James Thomas said.

As of 3 p.m., the bands of clouds had dropped 0.64 of an inch of rain in Tierra del Sol, 0.59 in Campo, 0.35 in Descanso, 0.32 in Barona, 0.22 in Ramona, 0.15 in Rainbow, 0.12 in Rancho Bernardo and 0.06 in Alpine.

By late afternoon, the unsettled atmospheric system was moving out of the region to the northwest, making way for clearing skies. The conditions, however, could return in a milder form early Wednesday, bringing scattered showers east of the inland valleys, Thomas said.

This week's toasty temperatures were expected to peak this afternoon in advance of a modest cooling trend that should continue into early next week, according to forecasters.

<http://fox5sandiego.com/2015/06/30/thunderstorm-lets-loose-on-san-diego/>[3/18/2016 10:53:08 AM]

Fig A-22: FOX 5 NEWS – Article Thunderstorm lets loose on San Diego:
<http://fox5sandiego.com/2015/06/30/thunderstorm-lets-loose-on-san-diego/>
[http://fox5sandiego.com/2015/06/30/thunderstorm-lets-loose-on-san-diego/](#)[3/18/2016 10:53P:08 AM]

FIGURE A-23
FOX 5 ARTICLE THUNDERSTORMS SAN – PAGE 2

10/25/2017

June | 2015 | ZachNews

ZachNews

Monthly Archives: June 2015

NEWS

Weather Alert!!: Vidal Junction, CA: Storms moving across the Vidal Junction, California area.

JUNE 30, 2015 | ZACHNEWS | [LEAVE A COMMENT](#)

zachnews-weather-alert-logo3 (<https://zachnews.files.wordpress.com/2015/06/zachnews-weather-alert-logo31.jpg>)

Weather Alert!!: Vidal Junction, CA: Storms moving across the Vidal Junction, California area.

ZachNews is watching storms with thunder, lightning, and moderate to heavy rain falling moving west across the Vidal Junction, California area.

These storms are scattered storms are as far east as Lake Havasu City, Arizona and as far south as near Blythe, California moving over the Colorado River area.

Lightning and light duct is being seen in both Topock, Arizona and Needles, California from these passing storms.

People living or hanging out around the Vidal Junction, California area including Twentynine Palms, California, Havasu Landing, California, Lake Havasu City, Arizona, Topock, Arizona, Needles, California, and Amboy, California should be prepared in case of any storm related problems.

Drivers along Interstate 40, U.S. 95 (Highway 95), and S.R. 62 (Highway 62) in California should be prepared and use caution if stormy weather conditions arrive.

◀ [AMBOY](#) ◀ [HAVASU LANDING](#) ◀ [HIGHWAY 62](#) ◀ [HIGHWAY 95](#) ◀ [I40](#) ◀ [INTERSTATE 40](#) ◀ [LAKE HAVASU CITY](#) ◀ [MONSOON WATCH](#) ◀ [MONSOON WATCH 2015](#) ◀ [NEEDLES](#) ◀ [S.R. 62](#) ◀ [STATE ROUTE 62](#) ◀ [STORM](#) ◀ [STORMS](#) ◀ [TOPOCK](#) ◀ [TWENTYNINE PALMS](#) ◀ [U.S. 95](#) ◀ [VIDAL JUNCTION](#) ◀ [WEATHER ALERT!!](#)
[NEWS](#)

<https://zachnews.wordpress.com/2015/06/>

1/19

Fig A-23: Zach news excerpt for Vidal Junction, California. Vidal is near Blythe California
<https://zachnews.wordpress.com/2015/06/>

FIGURE A-24
AIR QUALITY INDEX

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health alert: everyone may experience more serious health effects.
Hazardous	301 to 500	Health warnings of emergency conditions. The entire population is more likely to be affected.

Fig A-24: The Air Quality Index (AQI) is an index for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health effects might be a concern for you. The AQI focuses on health affects you may experience within a few hours or days after breathing polluted air. EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, EPA has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country. Source: <https://airnow.gov/index.cfm?action=aqibasics.aqi>

FIGURE A-25
IMPERIAL COUNTY DAILY WEATHER AND AG BURNING INFORMATION

Imperial County Air Pollution Control District
Daily Weather and Ag. Burning Information

Date: Tuesday June 30 2015

Yesterday's Weather Observations at Imperial Airport (ASOS) FAA/NWS

LOCAL TIME	TEMP °F	WINDS MILES PER HOUR	VISIBILITY MILES
7 AM	88	SE 7	10
8 AM	89	E 7	10
9 AM	91	SSE 7	10
10 AM	98	CALM	10
11 AM	99	VRBL 7	10
NOON	99	ESE 9	10
1 PM	104	ENE 6	10
2 PM	105	VRBL 6	10
3 PM	106	VRBL 5	10
4 PM	107	VRBL 5	10
5 PM	107	W 6	10
6 PM	106	W 5	10
7 PM	105	W 5	10

Max. Temperature yesterday was 107 degrees

Today's Mt. Signal Visibility at 7:30 AM YES NKX 12Z 500 MB Height _____
1Y7 12Z 500 MB Height _____

Forecasts
High Today 108

Local Forecast Computer Forecast
(Issued 8 AM Local) (RUC 40KM 12Z)

Est. Time Mixing Height reaches 3000 feet	<u>9:30</u>
Forecast of Maximum Mixing Height	_____ feet <u>11,800</u> feet
Forecast for Morning surface winds	<u>S 5-10</u> mph <u>S 5-10</u> mph
Forecast for afternoon surface winds	<u>SW 5-10</u> mph <u>SW 5-10</u> mph
Forecast for evening surface winds	<u>SW 10-15</u> mph
Forecast 10 AM - 3 PM transport winds	<u>SE 5-10</u> mph

Comments/Complaints: MARGINAL GREEN WASTE ONLY

Burn Hours 12-3 ARB No Burn Day _____ District called No Burn Day _____
Total actually burned today _____ acres Crops burned _____

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT 2011 Int MC

Fig A-25: A copy of the Imperial County Air Pollution Control District official record of the conditions as they existed for a determination of a "Marginal Green Waste Only" day on June 30, 2015

FIGURE A-26
IMPERIAL COUNTY AFFIDAVIT 30 DAY PUBLIC NOTICE

AFFIDAVIT OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Imperial

I am a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk* of the printer of the

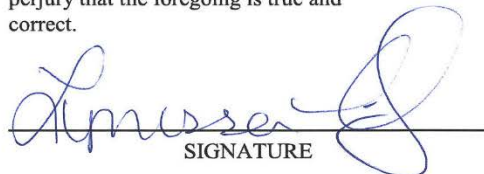
Imperial Valley Press

a newspaper of general circulation, printed and published daily in the City of El Centro, County of Imperial and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Imperial, State of California, under the date of October 9, 1951, Case Number 26775; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

01/10.

all in the year 2018

I certify (or declare) under penalty of perjury that the foregoing is true and correct.


 SIGNATURE

Name of Account: I C AIR POLLUTION
 CONTROL
 Order Number: 11136200
 Ad Number: 31356303

* Printer, Foreman of the Printer, or Principal Clerk of the Printer

Date: 10 th day of January, 2018.
 at El Centro, California.

This space is for the County Clerk's
 Filling Stamp:

AIR POLLUTION CONTROL DISTRICT
 NOTICE OF AVAILABILITY
 OF THE DEMONSTRATION OF THE OCCURRENCE
 OF 13 EXCEPTIONAL EVENTS (EE)

The Imperial County Air Pollution Control District (Air District) has prepared 13 Draft Exceptional Event (EE) Demonstrations, which support the requested exclusion measured 24-hour concentrations at the Air District air monitoring sites. Listed below by date, site and concentration as measured by a Federal Reference Method monitor (FRM) or with a continuous Federal Equivalent Method monitor (FEM) represent the 13 Draft EE's.

2014	2016	2016
April 12 - 13	March 6	April 22
Niland FEM 167.5 ug/m ³	Brawley FEM 237 ug/m ³	Westmorland FEM 192 ug/m ³
Brawley FEM 166.8 ug/m ³	Westmorland FEM 220 ug/m ³	Brawley FEM 242 ug/m ³
April 25-26	March 11	April 24-25
Brawley FEM 185.4 ug/m ³	Brawley FEM 178 ug/m ³	Brawley FRM 186 ug/m ³
Brawley FEM 313.3 ug/m ³	Westmorland FEM 179 ug/m ³	Brawley FEM 218 ug/m ³
May 5-6	March 28	Westmorland FEM 177 ug/m ³
Brawley FEM 269 ug/m ³	Brawley FEM 334 ug/m ³	Brawley FEM 285 ug/m ³
Brawley FEM 225.5 ug/m ³	El Centro FEM 245 ug/m ³	Calixico FEM 173 ug/m ³
Westmorland FRM 375 ug/m ³	Niland FEM 334 ug/m ³	Niland FEM 225 ug/m ³
Brawley FEM 439.3 ug/m ³	Westmorland FEM 465 ug/m ³	Westmorland FEM 244 ug/m ³
May 11	April 14	May 5
Niland FEM 172.8 ug/m ³	Niland FEM 172.8 ug/m ³	Brawley FEM 163 ug/m ³
June 30	Westmorland FEM 163 ug/m ³	Niland FEM 172 ug/m ³
Niland FEM 183.7 ug/m ³	Brawley FEM 228 ug/m ³	Westmorland FEM 227 ug/m ³
	May 15	
	Niland FEM 216 ug/m ³	

The public and all interested parties are encouraged to review and comment on the 13 Draft EE's listed above. These demonstrations provide the supporting evidence that on the days indicated for 2014, 2015 and 2016 Air District air monitors were affected by entrained elevated levels of particulate matter of an aerodynamic size less than 10 microns (PM10). Winds, associated with a weather event entrained PM10 into the region affecting Riverside, Imperial and San Diego counties. The 13 Draft EE's provide the scientific justification for the requested exclusions. The Air District is soliciting and accepting comments for 30 days commencing the date of the publication of this notice. The final closing date for submitting comments is February 12, 2018 by close of business.

The 13 Draft EE's for days listed above are available for download at the Air District website at www.co.imperial.ca.us, under "Air Pollution". To view a hard copy of any of the 13 Draft EE's, please visit the Air Pollution Control District office at 150 S. 9th Street, El Centro. Should you have any questions or concerns please feel free to call our office between 8am and 5pm at (442) 265-1800 and ask for Monica N. Soucier.

L673 J10

Fig A-26: Is a copy of the Imperial County Air Pollution Control District official record (affidavit) affirming the publication of the notice of availability of the Exceptional Events Demonstration for June 30, 2015. The date for closing comments was February 12, 2018

FIGURE A-27
IMPERIAL COUNTY COMMENTS
REGARDING THE JUNE 30, 2015 EE DEMONSTRATIONS

The ICAPCD received no comments